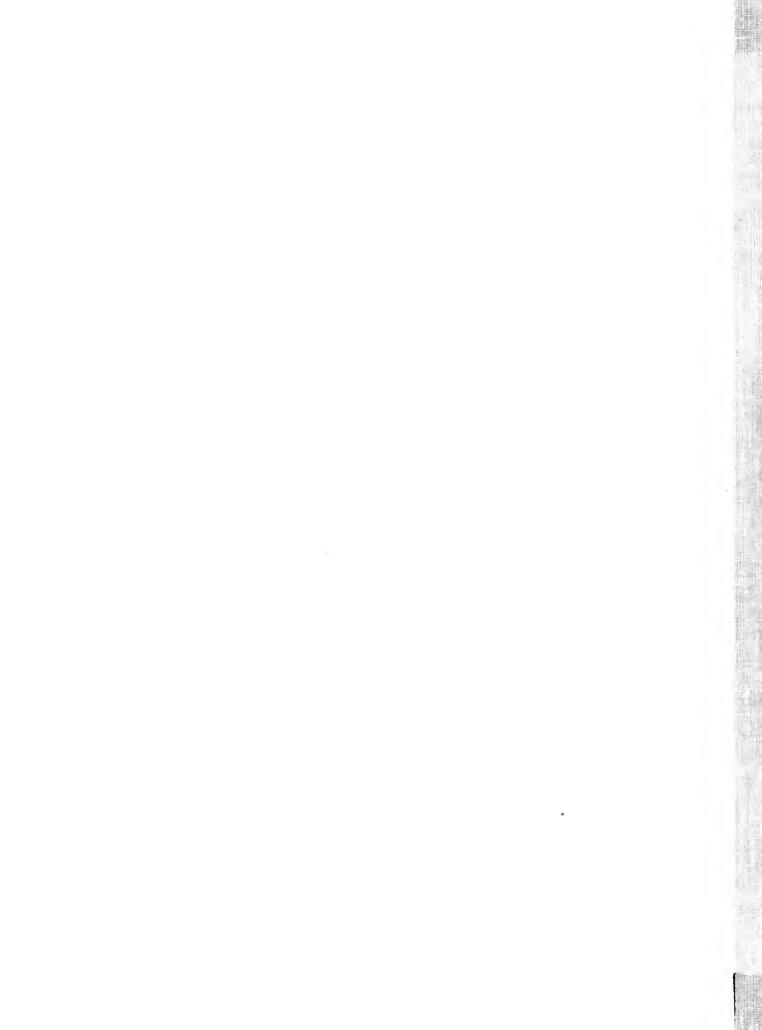
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Mack N. Leath, Lowell D. Hill, and Stephen W. Fuller North Central Regional Research Publication No. 273 Southern Cooperative Series Bulletin 251 Illinois Bulletin 766 Agricultural Experiment Station College of Agriculture University of Illinois at Urbana-Champaign

ABSTRACT

The marketing of soybeans in the U.S. involves complex interregional grain movements. Moving the crop from the area of concentrated production to points where it is used or exported requires a large transportation capacity. To provide a basis for policy and investment decisions, detailed information on soybean movements during 1977 was collected from 3,500 grain merchandising, processing, and exporting firms in 41 states. Survey data on receipts and shipments for each state or substate area were expanded to represent total volumes for those areas and were verified by comparison with information from secondary sources. The data, which represent the most comprehensive and accurate information available on soybean movements, are presented and summarized in this bulletin.

Keywords: Grain flows, grain shipping, grain transportation, interregional analysis, soybeans, soybean marketing

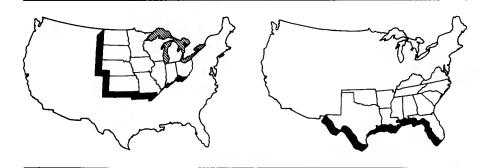
Soybean Movements in the United States Interregional Flow Patterns and Transportation Requirements in 1977

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North Central Regional Research Publication No. 273 Southern Cooperative Series Bulletin 251 Illinois Bulletin 766



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January 1981

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Preface

The research reported in this bulletin is the first effort ever made to survey grain shippers and receivers nationwide; it is the most comprehensive study of grain movements ever conducted. Members of the technical committees, including representatives of Agricultural Experiment Stations in 25 states, assisted in conducting an industry survey to collect flow data for wheat, corn, soybeans, sorghum, oats, barley, and rye. In addition, surveys were conducted in 16 other states through contracts with 15 universities located in those states. The industry surveys were coordinated by Lowell D. Hill, Department of Agricultural Economics, University of Illinois at Urbana-Champaign. The data were tabulated and summarized under the supervision of Mack N. Leath, Economics and Statistics Service, U.S. Department of Agriculture. The success of this research project is due to the cooperation of thousands of grain marketing firms and the efforts of researchers in the many participating states.

The research was funded in part through contract DACW 72-78-C-0005 with the Institute of Water Resources, U.S. Army Corps of Engineers. Supplemental support was provided by the Federal Railroad Administration of the U.S. Department of Transportation, the Maritime Administration of the U.S. Department of Commerce, and the St. Lawrence Seaway Development Corporation. Administration of grant funds was coordinated by Lowell D. Hill, University of Illinois at Urbana-Champaign.

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Soybean Movements in the United States

Interregional Flow Patterns and Transportation Requirements in 1977

INTRODUCTION

Information about the origin and destination of grain produced in the United States and about the modes of transportation used to convey it is important for many policy and investment decisions. Although data on the quantities of grains shipped abroad from each port are available and statistics on the amount of grain shipped on the inland waterways are published annually, little information has been available that could be used to match origins with destinations and to identify the mode of transportation used.

Through personal interviews with over 3,500 grain merchandisers, processors, and exporters throughout the United States, data on origins, destinations, and transport modes have now been assembled for corn, wheat, soybeans, sorghum, oats, barley, and rye. This publication summarizes the data for soybeans. Other publications in this series provide similar information for the other grains.

Soybeans are the most important oilseed crop produced in the United States. In the 1970s annual production expanded every year except two and doubled during that decade, increasing from 1,127 million bushels in 1970 to 2,268 million bushels in 1979 (Table 1). The volume of soybeans produced exceeded total wheat production in both 1978 and 1979. Currently soybeans rank second among major field crops in terms of annual volume produced, exceeded only by corn.

The major domestic use of soybeans is the production of soybean meal and oil. Soybean processors crushed over one billion bushels in 1978–79, a record for the U.S. (Table 1). During calendar year 1977, they crushed 971 million bushels. The volume crushed varies from year to year, depending upon the availability of beans and the demands for meal and oil.

The amount used for seed is almost totally a function of the acreage planted. The increase in that quantity during the late 1970s reflects the rapid expansion in soybean acreage. In 1979 a record 71.6

Table 1. Soybean Supply and Distribution in the United States for Marketing Years from 1970-71 to 1979-80

		Supply				Disappe	arance		
Marketing year ^a	Begin- ning stocks	Produc- tion	Total	Crush- ing	Seed	Feed	Residual	Net exports ^b	Total
			•	millio	ns of bush	e/s			
1970–71	230	1,127	1,357	760	48	1	15	434	1,258
1971-72	99	1,176	1,275	721	51	1	13	417	1,203
1972-73	72	1,271	1,343	722	61	1	20	479	1,283
1973-74	60	1,547	1,607	821	56	1	19	539	1,436
1974–75	171	1,216	1,387	701	57	1	22	421	1,202
1975–76	185	1,547	1.732	865	54	1	13	555	1,488
1976-77	245	1,288	1,533	790	62	0	14	564	1,430
1977-78	103	1,762	1,865	927	69	0	7	701	1,704
1978-79	161	1,870	2,031	1,018	76	0	10	753	1,857
1979- 80 °	174	2,268	2,442	1,130	80	0	17	850	2,077

Source: Fats and Oils Situation, Economics and Statistics Service, U.S. Department of Agriculture, FOS-300 (July, 1980), p. 6.

^a Beginning September 1.

^b The volume imported was negligible.

^c Preliminary data.

million acres were planted to soybeans, and seed usage jumped to a new peak of 76 million bushels during the 1978–79 marketing year.

The volume exported, which increased every year except two during the 1970s, has consistently amounted to between 35 and 40 percent of the total annual disappearance. Export shipments of soybeans increased from 417 million bushels in 1971–72 to an estimated 850 million bushels in 1979–80. During calendar year 1977, 593 million bushels were exported.

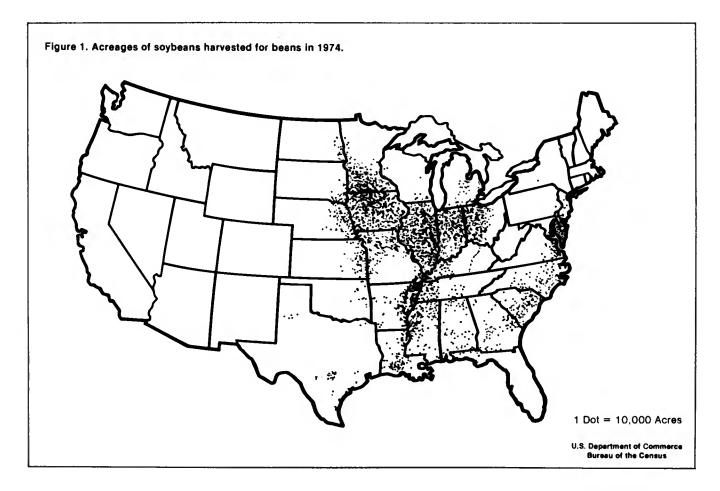
The volume of soybeans that must be transported is large because the crop is grown in a highly concentrated production area and because the very large export volume is channeled primarily through one export region comprising the ports on the Gulf of Mexico. Soybean production is confined almost entirely to the eastern half of the country (Figure 1) where summer rainfall is adequate. Production is concentrated in the Corn Belt region (Ohio, Indiana, Illinois, Iowa, Missouri, and Minnesota) and the Mississippi River Delta region (Tennessee, Mississippi, Arkansas, and Louisiana). The Corn Belt region produced about 65 percent of the total U.S. soybean crop in 1977, and the Delta region produced about 17 percent (Table 2).

PURPOSE OF STUDY

Analysis of grain flow patterns can reveal the geographical nature of grain markets and the types of transportation services required by the grain industry. This information is useful to grain firms in identifying additional marketing opportunities and in making decisions about where to locate new handling, storage, and processing facilities.

Of equal importance is the value of this information to those who set federal and state transportation policies. The formulation of rational grain transportation policies depends upon knowledge of existing grain flows and associated transportation modes. In many situations, firms or public agencies make decisions affecting the production, storage, and transportation of grain without adequate information about grain distribution patterns and the demands that those decisions will place on the various transportation modes. The objectives of this study were:

- 1. To determine the volume of soybeans moving between various origins and destinations
- 2. To determine the extent to which the various transportation modes are employed in the movement of soybeans in the U.S.



METHODOLOGY

For the purposes of this study, the United States was divided into 132 numbered regions and 31 ports, as shown in Figure 2. Data for the 31 ports were aggregated into 13 port areas located in four major export regions. The specific ports included in each port area are listed with their identifying numbers in Table 3.

Soybean flow data were collected for the 1977 calendar year primarily through personal interviews with representatives of grain handling, storage, and processing firms in 41 states. The firms from which data were obtained included country elevators, inland terminal elevators, river terminal elevators, feed manufacturers, export elevators, commercial feedlots, and processors. A representative from each state's Agricultural Experiment Station was responsible for drawing the sample and conducting the interviews.

The sampling of inland grain elevators in the particular state was carried out by listing the elevators in descending order of storage capacity. Starting with the largest, elevators were added to the sample until the total of their storage capacities was equal to at least 25 percent of the inland elevator storage capacity in that state. Not less than 10 percent of the remaining elevators were then selected at random. For river elevators the procedure was simpler: a minimum of 50 percent of the elevators were selected by random sampling.

Feed manufacturing firms in each state were arrayed on the basis of their production capacity. Starting with the largest, feed firms on the list were added to the sample until the total of their production capacities equalled or exceeded 10 percent of the total feed manufacturing capacity in the state. Ten percent or more of the remaining firms were then selected at random and included in the sample. All exporters and processors were included in the interviews.* Data based on random samples were expanded in proportion to the sampling rate to convert the data into estimates for the entire region or state.

The same types of information were gathered from all of the grain handlers and processors interviewed. Each firm was asked to identify the volume of soybeans that it received from each region and the volume received by each mode of transportation. The firms were also asked to identify each region or port area for which their shipments were destined and the quantity shipped by each mode.

Agricultural Experiment Station representatives verified the accuracy of the data collected, expanded the sample data to state totals, and delivered the summary data for each grain and for every substate region to the U.S. Department of Agriculture for processing. As receivers' and shippers' data were tabulated, the Experiment Station representative in each state checked any discrepancies to identify potential data errors and to arrive at a single number for each origin-destination pair. Insofar as possible, the state representatives checked the data for each shipment to ascertain that they were consistent and logical.

Table 2. Production, Farm Use, and Sales of Soybeans by State for the 1977 Crop

State	Production	Used on farms where produced	Sales
	thous	ands of bus	hels
Alabama	33,600	302	33,298
Arkansas	105,800	2,010	103,790
Delaware	5,400	151	5,249
Florida	8,175	65	8,110
Georgia	21,800	676	21,124
Illinois	336,300	3,027	333,273
Indiana	144,300	1,732	142,568
lowa	251,340	2,765	248,575
Kansas	28,215	705	27,510
Kentucky	40,920	532	40,388
Louisiana	62,980	252	62,728
Maryland	8,775	272	8,503
Michigan	21,600	562	21,038
Minnesota	133,835	2,275	131,560
Mississippi	78,475	1,099	77,376
Missouri	148,800	2,381	146,419
Nebraska	40,680	895	39,785
New Jersey	4,248	102	4,146
New York	437	37	400
North Carolina	29,040	668	28,372
North Dakota	3,500	98	3,402
Ohio	119,990	1,800	118,190
Oklahoma	7,820	242	7,578
Pennsylvania	2,077	98	1,979
South Carolina	26,650	799	25,851
South Dakota	9,608	269	9,339
Tennessee	52,170	991	51,179
Texas	20,140	60	20,080
Virginia	8,360	293	8,067
Wisconsin	6,720	<u>269</u>	6,4 <u>51</u>
U.S. total	1,761,755	25,427	1,736,328

Source: Field Crops: Production, Disposition, Value, 1977–1978, Economics and Statistics Service, U.S. Department of Agriculture, CrPr 1 (79) (April 11, 1979), p. 13.

^{*} Only one major processor did not provide data for the study. Data on receipts by that firm were estimated from information furnished by shippers.

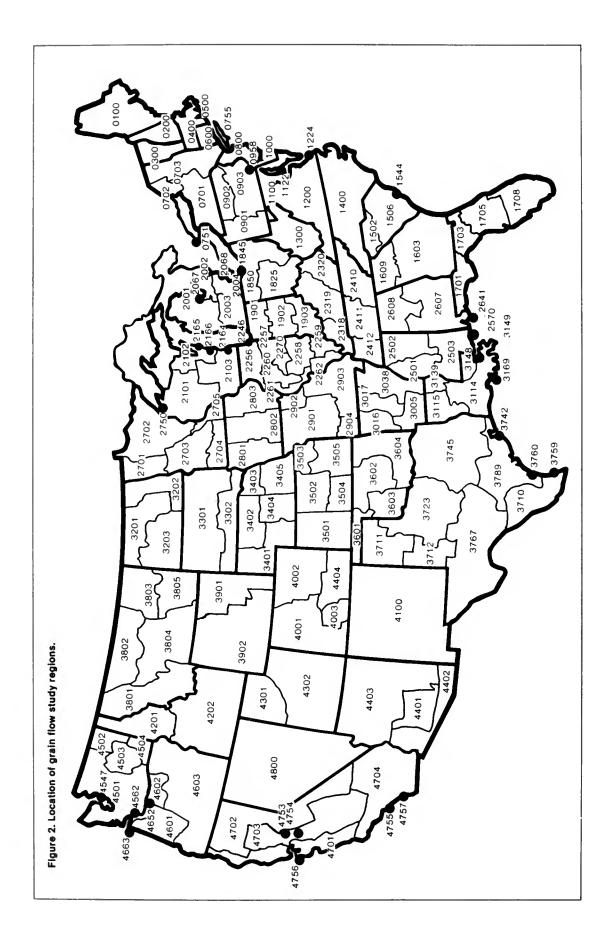


Table 3. Export Regions, Port Areas, and the Ports Included in Each Area

Export reg	ion and port areaª	Ports incl	uded in the general area	
Area number	Eynort area		Port city	
Great Lakes Region	n			
7101	Duluth-Superior	2750	Duluth, MN Superior, WI	
7102	Chicago	2164	Milwaukee, WI	
	· ·	2165	Manitowoc, WI	
		2166	Racine, WI	
		2246	Chicago, IL	
7103	Toledo	1845	Toledo, OH	
	. 3.333	, 0, 10	Huron, OH	
			Erie, PA	
		0751	Buffalo, NY	
7404	0			
7104	Saginaw	2067	Carrollton, MI	
			Saginaw, MI	
			Zilwaukee, MI	
		2068	Detroit, MI	
Atlantic Region				
7201	North Atlantic	0101	Portland, ME	
		0755	Albany, NY	
		0958	Philadelphia, PA	
7202	South Atlantic	1122	Baltimore, MD	
		1224	Norfolk, VA	
		1544	North Charleston, S	
Gulf Region				
7301	East Gulf	2570	Pascagoula, MS	
7301	East Guil	2641	Mobile, AL	
				
7302	Louisiana Gulf	3149	Mississippi River	
		3169	Lake Charles, LA	
7303	North Texas Gulf	3742	Beaumont, TX	
			Port Arthur, TX	
			Houston, TX	
			Galveston, TX	
7304	South Texas Gulf	3759	Brownsville, TX	
700 /	Codin rexus dun	3760	Corpus Christi, TX	
		0,00	Co.pac c.m.c., vx	
Pacific Region	Onlymphia Birry	4500	14-1 1848	
7401	Columbia River	4562	Kalama, WA	
			Longview, WA	
		4050	Vancouver, WA	
		4652	Portland, OR	
		4663	Astoria, OR	
7402	Puget Sound	4547	Seattle, WA	
			Tacoma, WA	
7403	California Ports	4753	Sacramento, CA	
	- · · · ·	4754	Stockton, CA	
		4755	Long Beach, CA	
		4756	San Francisco, CA	

^a These port areas will be used in this report to avoid disclosure of data from individual firms.

VERIFICATION OF DATA

The accuracy of the data on the volume of soybeans shipped between the various origins and destinations by each mode of transportation was verified by several direct and indirect comparisons with data from other sources. One indirect check was made by totaling interstate shipments and subtracting from that value the total of interstate receipts for each state to determine how closely the results agreed with the surplus or deficit calculated for the state.* Exact correspondence was not expected since the quantities used for seed and crushed by processors were estimated rather than determined from actual consumption data. Any major discrepancies, however, were investigated to verify that they did not indicate significant errors in the survey data.

A second check on total volume was made by comparing total receipts at each port with official data on inspections for export as published by the Market News Service of the U.S. Department of Agriculture (Table 4). Because there were few opportunities for either set of data to miss significant volumes, these numbers compared very closely. Discrepancies between receipts and exports at some of the port areas were explained by shipments to domestic destinations from export elevators, shipments to processing plants located in the port area, and changes in inventory between the beginning and end of the year.

Supplemental information about grain shipments on inland waterways was provided by the U.S. Army Corps of Engineers. Since these data were based on the actual bill of lading for each shipment, they were, in principle, a complete census of all barge shipments. As Table 5 shows, the survey data and the Corps of Engineers data on state-to-state shipments on inland waterways correspond closely. Differences between the two sets of data can be explained by (1) a significant number of shipments for which the origins and destinations are noted as "unknown" in the Corps data, (2) changes in the destination of a barge after it left the loading dock, (3) incomplete reporting of loadings to the Corps of Engineers, and (4) errors in reporting by survey respondents. Substantial differences were found in the two sets of data on the volume moving by barge from several states. These differences could not be resolved.

The last method of validation provides important insight into U.S. Department of Transportation data

based on a 1 percent sample of all rail bills of lading. These data were expanded to develop estimates of annual shipments and receipts in each state and then compared with the rail shipments reported by survey respondents (Table 6). Some similarities are apparent, but there are also many major differences. These discrepancies appear to be greatest for cases where unit trains account for a large share of the shipments between states, and they appear to be smallest where single-car shipments predominate. Additional analysis of both data sets led to the conclusion that there are serious sampling errors in the 1 percent waybill statistics and that those data should therefore be used with caution, expecially where soybeans commonly move in multiple-car units. In Ohio and Indiana, intrastate movements to the Atlantic ports were seriously understated in the 1 percent waybill sample.

The comparisons between various data sources increase the confidence in the accuracy of estimates

Table 4. Comparison of 1977 Soybean Receipts, Shipments, and inspections for Export at Various Port Areas

Port	Quantitie mined by		Inspections for	
area ^a	Receipts	Exports	export⁵	
	thous	ands of bu	shels	
GREAT LAKES REGION				
Duluth-Superior	0	0	0	
Chicago	29,491	15,866	14,187	
Toledo	46,795	47,088	47,088	
Saginaw	1,148	1,148	1,317	
Subtotal	77,434	64,102	62,592	
ATLANTIC REGION				
North Atlantic	14,140	13,802	12,287	
South Atlantic	56,782	<u>53,996</u>	53,218	
Subtotal	70,922	67,798	65,505	
GULF REGION				
East Gulf	71,122	68,325	68,225	
Louisiana Gulf	387,502	368,153	368,153	
North Texas Gulf	27,491	27,450	27,447	
South Texas Gulf	0	0	0	
Subtotal	486,115	463,928	463,825	
PACIFIC REGION				
Columbia River	565	565	605	
Puget Sound	443	443	17	
California	295	295	295	
Subtotal	1,303	1,303	917	
Total	635,774	597,131	592,839	

See Table 3 for a list of ports.

The surplus or deficit for each state was calculated by adding the 1977 production to the stocks in all positions as of January 1, 1977, then subtracting the estimated amount used for livestock feed, processing, and seed and deducting the stocks in all positions as of January 1, 1978.

^b Inspections for export conducted under the U.S. Grain Standards Act and reported in *Grain Market News*, Agricultural Marketing Service, U.S. Department of Agriculture, Vol. 26, No. 2 (January 13, 1978), p. 18.

Table 5. Comparison of 1977 Waterway Movements of Soybeans in the U.S. as Reported by Survey Respondents and the U.S. Army Corps of Engineers

Originating state	Destination state	Survey results	Corps of Engineers data
		thousar	nds of bushels
Alabama and Tennessee	Alabama and Tennessee	10,719	13,801
	Louisiana and Mississippi	18,603	21,311
	Subtotal	29,322	35,112
Arkansas	Louisiana and Mississippi	38,586	15,455
Florida	Alabama and Tennessee	1,616	2,633
	Louisiana and Mississippi	813	1,165
	Subtotal	2,429	3,798
Illinois	Alabama and Tennessee	10,649	7,480
	Arkansas	4,000	97
	Illinois	1,321	1,717
	Louisiana and Mississippi	109,109	100,852
	Subtotal	125,079	110,146
Indiana	Alabama and Tennessee	562	219
	Louisiana and Misslssippi	8,033	9,202
	Subtotal	8,595	9,421
lowa	Alabama and Tennessee	692	1,720
	Illinois	0	134
	Louisiana and Mississippi	29,615	31,700
	Subtotal	30,307	33,554
Kansas and Nebraska	Alabama and Tennessee	0	35
	Louisiana and Mississippi	1,878	1,419
	Subtotal	1,878	1,454
Kentucky	Alabama and Tennessee	287	618
,	Louisiana and Mississippi	11,393	8,376
	Subtotal	11,680	8,994
Louisiana and Mississippi	Louisiana and Mississippi	71,814	54,801
	Other states	0	5,095
	Subtotal	71,814	59,896
Minnesota and Wisconsin	Louisiana and Mississippi	25,940	23,689
	Other states	0	743
	Subtotal	25,940	24,432
Missouri	Alabama and Tennessee	2,000	1,406
	Louisiana and Mississippi	40,930	46,639
	Other states	3,205	<u>468</u>
	Subtotal	46,135	48,513
Ohio	Louisiana and Mississippi	10,496	8,761
	Other states	<u>507</u>	893
	Subtotal	11,003	9,654
Oklahoma	Louisiana and Mississippi	1,900	2,152
	Other states	350	<u> 186</u>
	Subtotal	2,250	2,338
Other states	Other states	5,469	4,507
U.S. total		410,487	341,149

Table 6. Comparison of 1977 Rall Movements of Soybeans as Reported by Survey Respondents and as Estimated from the 1 Percent Waybill Sample in Selected States

Originating state	Destination state	Survey results	Waybill data
		thousands	s of bushels
Alabama and Tennessee	Alabama and Tennessee Delaware, Maryland, North	14,305	9,207
	Carolina, and Virginia Florida, Georgia, and South	320	323
	Carolina	1,998	2,184
	Kansas and Nebraska	0	333
	Louisiana and Mississippi	3,857	1,758
	Subtotal	20,480	13,805
Arkansas	Alabama and Tennessee	371	200
	Arkansas	17,468	9,627
	Louisiana and Mississippi	14,119	3,024
	Texas	204	486
	Subtotal	32,162	13,337
Delaware, Maryland, North	Delaware, Maryland, North		
Carolina, and Virginia	Carolina, and Virginia	4,430	3,004
	Florida, Georgia, and South	545	000
	Carolina	<u>515</u>	280
	Subtotal	4,945	3,284
Florida, Georgia, and South Carolina	Alabama and Tennessee Delaware, Maryland, North	640	892
	Carolina, and Virginia Florida, Georgia, and South	548	583
	Carolina	10,131	7,709
	Louisiana and Mississippi	<u> 1,527</u>	1,092
	Subtotal	12,846	10,276
Illinois	Alabama and Tennessee Delaware, Maryland, North	13,258	8,095
	Carolina, and Virginia Florida, Georgia, and South	2,585	2,871
	Carolina New York, New Jersey, and	2,537	1,442
	Pennsylvania	2,055	656
	Illinois	12,949	13,640
	Indiana	1,895	2,980
	Kentucky	27	1,365
	Louisiana and Mississippi	2,596	553
	Texas Other	320	653
	Subtotal	<u>2,708</u> 40,930	32,255
Indiana			
Indiana	Alabama and Tennessee Delaware, Maryland, North	1,250	1,229
	Carolina, and Virginia	21,213	16,473
	Illinois	1,635	566
	Indiana Kentucky	173 2,684	976 1,242
	New York, New Jersey, and	2,004	1,242
	Pennsylvania	2,055	996
	Other	4,414	
	Subtotal	33,424	21,482
			Continued

Table 6 -- continued

Originating state	Destination state	Survey results	Waybill data
		thousand	s of bushels
Iowa	Delaware, Maryland, North		
	Carolina, and Virginia	429	649
	Illinois	5,643	9,227
	lowa	12,265	15,431
	Kansas and Nebraska	166	1,362
	Louisiana and Mississippi	24,812	13,467
	Minnesota	99	216
	Missouri	1,669	1,036
	Texas	6,127	4,962
	Washington	0	2,191
	Other	<u>611</u>	C
	Subtotal	51,821	48,541
Kansas and Nebraska	Alabama and Tennessee	2,299	0
	Arkansas	1,500	1,911
	Iowa	503	143
	Kansas and Nebraska	10,330	9,729
	Louisiana and Mississippi	229	639
	Missouri	1,824	1,958
	Texas	384	200
	Other	182	C
	Subtotal	17,251	14,580
Kentucky	Alabama and Tennessee	3,594	1,882
	Delaware, Maryland, North		
	Carolina, and Virginia	2,426	3,434
	Florida, Georgia, and South		
	Carolina	225	216
	Illinois	0	313
	Louisiana and Mississippi	200	2,738
	New York, New Jersey, and	•	_
	Pennsylvania	0	C
	Other	80	
	Subtotal	6,525	8,583
Louisiana and Mississippi	Alabama and Tennessee	3,582	6,027
	Louisiana and Mississippi	10,287	8,608
	Texas	13	376
	Subtotal	13,882	15,011
Michigan	Delaware, Maryland, North		
3	Carolina, and Virginia	2,000	962
	New York, New Jersey, and	,	
	Pennsylvania	2,055	C
	Subtotal	4,055	962
Minnesota	lowa	947	333
- Milliesota	Louisiana and Mississippi	3,636	1,262
	Minnesota	6,926	8,325
	Oregon	349	0,020
	Texas	396	Č
	Washington	190	Č
	Subtotal	12,444	9,920
	Subtotal	1 = , ===	Continued

Table 6 — continued

Originating state	Destination state	Survey results	Waybill data
State	340		
			of bushels
Missouri	Alabama and Tennessee	277	280
	Arkansas	2,905	1,948
	Illinois	3,741	6,913
	Kansas and Nebraska	6,627	9,118
	Louisiana and Mississippi	0	2,737
	Missouri	23,299	13,187
	Oregon	0	629
	Texas	1,229	403
	Other	<u>575</u>	0
	Subtotal	38,653	35,215
Ohio	Delaware, Maryland, North		
	Carolina, and Virginia	27,669	16,963
	Florida, Georgia, and South		
	Carolina	5,457	3,873
	New York, New Jersey, and		
	Pennsylvania	6,785	9,464
	Other	<u>6,375</u>	0
	Subtotal	46,286	30,300
Oklahoma	Arkansas	0	926
	Kansas and Nebraska	111	256
	Louisiana and Mississippi	0	320
	Texas	1,852	0
	Subtotal	1,963	1,502
South Dakota	lowa	1,573	0
	Minnesota	350	330
	Texas	<u>51</u>	0
	Subtotal	1,974	330
Texas	Louisiana and Mississippi	360	646
	Texas	2,118	1,242
	Subtotal	2,478	1,888
Wisconsin	Illinois	1,543	426
	Minnesota	<u> 178</u>	0
	Subtotal	1,721	426
U.S. total		343,188	261,697

derived from sampling a less than perfectly identified population. The logic of each flow reported in this bulletin has been checked by the university person that organized the survey in each state. Where internal inconsistencies were found, the data and the sampling rates were adjusted with assistance from grain specialists and industry personnel in the state. The flow estimates presented in the following sections represent the best information available on the actual volume of soybeans transported between the regions of the U.S.

OVERVIEW OF MOVEMENTS

This section summarizes selected data and presents an overview of soybean movement patterns. De-

tailed data on receipts and shipments for each region are presented in the last section of this bulletin.

The soybean processing industry, the major domestic outlet for soybeans, has accounted for an average of 56 percent of the total soybean disappearance in the last five years. The industry is composed of 83 plants in 21 states.* Seven states have only one or two plants; in those cases, the publication of flow data for substate areas or even for individual states would reveal information about the activities of individual firms. To preserve the confidentiality of survey responses, flow data were

^{*} John W. Sharp, Grain Facilities in the U.S. Specializing in Originating Grain for Export and Soybean Processing Plants, Research Circular 241, Ohio Agr. Res. and Dev. Center, Wooster, Ohio, September, 1978.

aggregated across state lines in many instances. The following combinations of states are treated as regions in this report:

Area 6200: New York, New Jersey, and Pennsylvania

Areas 6300: Delaware, Maryland, North Carolina, and Virginia

Area 6400: Florida, Georgia, and South Carolina

Area 6500: Alabama and Tennessee Area 6600: Kansas and Nebraska

In addition, several of Texas's substate areas were combined into a general area (3700). In Minnesota, data for area 2704 were combined with those from area 2703 to avoid disclosure. In several states, such as Arkansas, data for the substate regions were aggregated into estimates for the entire state. In Louisiana, receipts at the soybean processing plants were combined with port elevator receipts (area 7302). Area and state data were aggregated only when necessary to protect confidentiality.

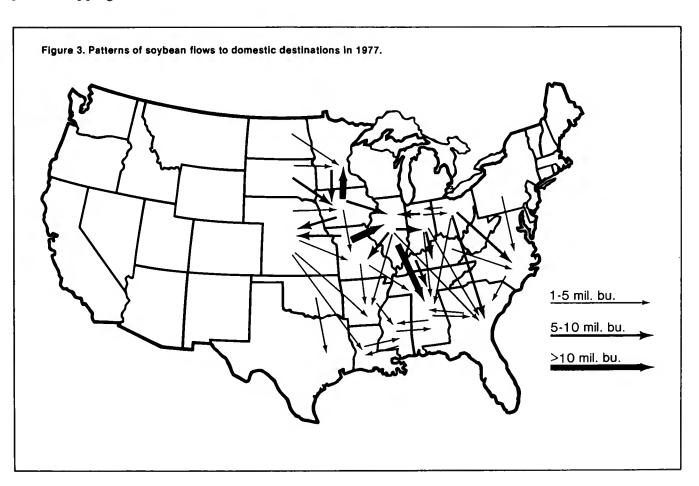
Shipments and Receipts by State

Grain marketing firms in the United States reported shipping an estimated 1.7 billion bushels

of soybeans in 1977. Much of the total amount, of course, is accounted for by the same grain being shipped in sequence by several firms. The domestic flow patterns for soybeans are illustrated in Figure 3.

About 55 percent of the total volume transported was sent to destinations within the state in which the shipments originated. Those intrastate shipments are summarized in Table 7. Trucks were the primary carriers of those shipments, transporting about 747 million bushels or more than 80 percent of the total intrastate shipment volume. Rail shipments were the principal mode in the Florida-Georgia-South Carolina area and in Missouri, whereas barge shipments were predominant in Louisiana. Trucking was the primary mode in other parts of the nation.

The greatest volume of intrastate shipments occurred in Illinois and Iowa. Intrastate shipments within those two states amounted to about 40 percent of all such movements. Approximately 37 percent of the nation's soybean processing capacity is located within those states, and these movements reflect that industry's sizeable demands for soybeans.



The balance of the volume shipped (45 percent) moved to interstate destinations. For states along the Mississippi River — with the exception of Iowa and Wisconsin - barges provided the principal means of transporting interstate shipments (Table 8). Illinois shipped 161 million bushels of soybeans to destinations in other states, more than any other state. The importance of the Illinois and Mississippi Rivers to Illinois agriculture is evidenced by the fact that over three-fourths of the shipments from Illinois to other states moved by barge. Iowa and Missouri were next in terms of the volume shipped to destinations in other states; they shipped 98 and 79 million bushels, respectively. Rail shipments predominated in Iowa, where they accounted for about two-fifths of the shipments to other states. Over half of the interstate shipments from Missouri firms moved by barge. Other states that shipped more than 50 million bushels to other states were Arkansas, Indiana, and Ohio.

Interstate receipts by mode of transportation are summarized in Table 9. In addition to the 765 million bushels transported between states by commercial carriers, almost 59 million bushels were hauled by farm trucks to grain handlers and processors in other states. The importance of the export market for soybeans, which is focused on Louisiana Gulf ports, is indicated by the fact that more than 40 percent of interstate shipments were destined for firms in Louisiana. More than 90 percent of the soybeans received in Louisiana arrived by barge.

States along the Atlantic coast were important termination points for interstate rail movements. This pattern reflects the importance of export markets served by port elevators located along the Atlantic seaboard. Illinois was the most important destination point for interstate truck shipments; about one-fourth of all such shipments were received there. The Chicago export market is an important drawing force for soybeans produced in northern Indiana and southern Wisconsin.

Movements to Ports

Table 10 shows the volume of soybeans that moved to port locations from each of the originating states by the three modes of commercial transportation. Figure 4 illustrates the pattern of these

Table 7. 1977 Intrastate Shipments of Soybeans for Each State and Mode of Transportation

Origination		Mode of tra	nsportation		
Originating state	Rail	Truck	Barge	Farm truck ^a	Total
		thou	sands of busi	hels	
Alabama and Tennessee	9,532	51,879	9,727	0	71,138
Arkansas	17,468	43,179	0	0	60,647
Delaware, Maryland, North					
Carolina, and Virginia	3,639	13,892	1,196	0	18,727
Florida, Georgia, and South Carolina	10,150	8,750	0	0	18,900
Illinois	12,949	189,509	1,321	0	203,779
Indiana	173	57,442	0	0	57,615
lowa	12,265	148,687	0	0	160,952
Kansas and Nebraska	9,168	27,384	0	0	36,552
Kentucky	80	2,434	0	0	2,514
Louisiana	1,613	27,355	45,381	0	74,349
Michigan	0	1,678	0	0	1,678
Minnesota	6,926	67,555	. 0	90	74,571
Mississippi	5,922	18,630	0	0	24,552
Missouri	23,299	19,495	3,205	0	45,999
New York, New Jersey, and					
Pennsylvania	0	485	0	0	485
Ohio	4,064	59,508	0	0	63,572
Oklahoma	0	214	0	0	214
Texas	2,118	7,855	0	0	9,973
Wisconsin	0	757	0	0	757
Total volume	119,366	746,515	60,830	90	926,801
Percentage of total volume	12.9	80.5	6.6	0	100.0

This column reports sales by elevators to farmers within the state. Not all states included farm sales in their questionnaires, so these data are incomplete and underestimate total shipments to farmers.

Table 8. 1977 Interstate Shipments of Soybeans for Each State and Mode of Transportation

Odelestics					
Originating state	Rail	Truck	Barge	Farm truck ^a	Total
		thous	ands of bush	els	
Alabama and Tennessee	10,948	10,509	19,595	0	41,052
Arkansas Delaware, Maryland, North	14,694	7,310	38,586	0	60,590
Carolina, and Virginia	1,306	14,260	4,273	0	19,839
Florida, Georgia, and South Carolina	2,696	2,271	2,429	0	7,396
Illinois	27,312	10,289	123,758	0	161,359
Indiana	33,251	31,287	8,595	0	73,133
lowa	39,556	28,118	30,307	0	97,981
Kansas and Nebraska	8,047	3,486	1,878	0	13,411
Kentucky	6,445	1,831	11,680	0	19,956
Louisiana	13	12,798	0	0	12,811
Michigan	4,055	13,389	0	0	17,444
Minnesota	5,518	5,456	24,590	0	35,564
Mississippi	6,334	4,647	26,433	0	37,414
Missouri	15,354	21,040	42,930	0	79,324
New Mexico	0	3	0	0	3
New York, New Jersey, and					
Pennsylvania	0	4,902	0	0	4,902
North Dakota	17	3,865	0	0	3,882
Ohio	42,222	4,961	11,003	0	58,186
Oklahoma	1,963	1,309	2,250	0	5,522
South Dakota	1,974	6,031	0	0	8,005
Texas	360	108	0	0	468
Wisconsin	1,721	4,037	1,350	0	<u>7,108</u>
Total volume	223,786	191,907	349,657	0	765,350
Percentage of total volume	29.2	25.1	45.7	0	100.0

^a This column reports sales by elevators to farmers in other states. Not all states included farm sales in their questionnaires, so these data are incomplete and underestimate total shipments to farmers.

movements, and Figure 5 shows the share that originated in each state.

Seven states shipped more than 40 million bushels to port areas. Illinois was the source of the greatest volume of soybeans destined for export regions, originating almost 122 million bushels. Quantities that were reshipped by Chicago-area firms to other port areas are excluded from this total. Almost all of the Illinois shipments went to the Gulf by barge.

Ohio and Iowa were second and third, respectively, in the volume shipped to points of export. Each contributed more than 60 million bushels or about 10 percent of the total amount shipped to port facilities. About 45 percent of Ohio soybeans destined for export moved to port facilities in the Toledo area. About 39 percent went by rail to the East Coast, and 16 percent were sent by barge to the Gulf. Nearly all of the Iowa export shipments went to the Gulf ports, about half by rail and half by barge.

Louisiana and Arkansas ranked fourth and fifth, respectively, in the quantity shipped to port areas. Each state shipped more than 50 million bushels. Indiana and Missouri each contributed more than 40 million bushels toward the shipments to port areas. The most important destinations for Indiana soybeans were the Atlantic ports. In 1977 Indiana firms shipped almost 23 million bushels to those ports. All shipments originating in Missouri moved to Gulf port elevators, almost all by barge.

Estimated receipts at all port locations in 1977 totaled 637 million bushels, of which Louisiana port facilities received about 60 percent (Table 11). The East Gulf port area ranked second in volume. Receipts at that location in 1977 totaled over 70 million bushels. Receipts at the South Atlantic and Toledo-area ports were 55 million and 47 million bushels, respectively. The combined receipts at these four port areas represented about 87 percent of the volume received at all ports, and the volume

of soybeans inspected for export at these ports was more than 90 percent of the total volume of soybeans exported from the United States.

Barges carried about 60 percent of the soybeans received at ports in 1977. Rail and truck shipments accounted for 23 percent and 16 percent, respectively, of the volume received. The strong position of Louisiana Gulf port facilities in the export of soybeans is highly dependent upon a steady flow of soybeans down the Mississippi River system.

Shippers not located adjacent to the major rivers are turning increasingly to unit trains as a means of moving soybeans to export points. Most unit train shipments that originated in Ohio and Indiana during 1977 moved to Atlantic ports. In contrast, those that originated in Iowa were usually destined for Gulf ports. Unit train shipments of soybeans were not found to be important in Illinois, where local processors are the primary outlet for the portion of the soybeans that are not marketed through river facilities. All unit train shipments of soybeans in 1977 moved to export areas.

Most of the soybeans received at Great Lakes ports were transported by truck. These port areas will likely continue to be dependent upon supplies trucked in from nearby production areas. With only a few exceptions, truck shipments received at any of the port areas originated within a few hundred miles of the port.

Foreign Destinations for U.S. Exports

Soybeans shipped from the various origins to a specific port area are commingled at the port elevator. It is not possible to trace the movement of soybeans from a particular state through the port system to their final destination, and therefore no attempt was made to determine whether a particular ocean vessel was loaded with, for example, Ohio soybeans or Illinois soybeans. It is nonetheless of interest to examine one more link in the market chain that connects U.S. farmers with foreign processors.

The destination countries for soybeans exported from the major export regions of the United States

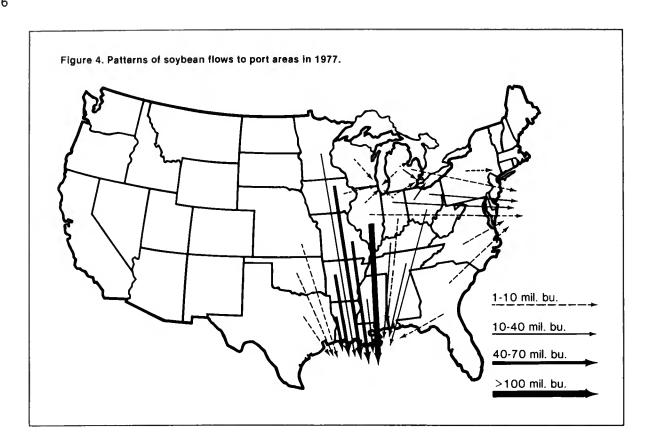
Table 9. 1977 Interstate Receipts of Soybeans for Each State and Mode of Transportation

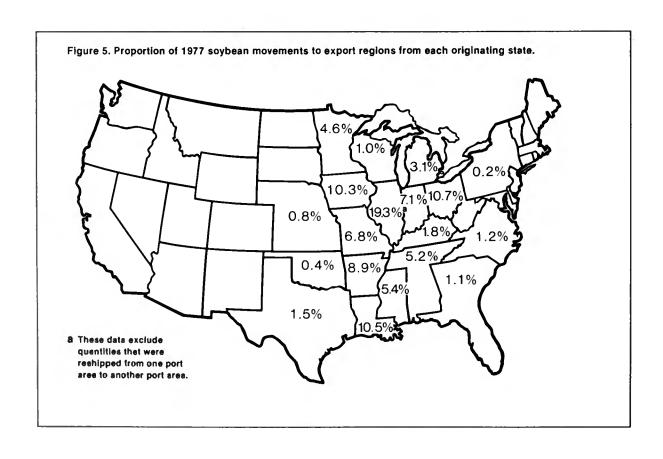
Destination		Mode of tra	nsportation		
Destination state	Rail	Truck	Barge	Farm truck ^a	Total
		thous	ands of bush	els	
Alabama and Tennessee	33,020	14,989	17,752	1,666	67,427
Arkansas	4,405	2,639	4,000	7,450	18,494
California	295	0	0	0	295
Delaware, Maryland, North					
Carolina, and Virginia	57,981	17,627	4,273	10,001	89,882
Florida, Georgia, and South Carolina	16,079	1,513	0	9,453	27,045
Illinois	12,562	46,091	0	9,414	68,067
Indiana	1,895	10,759	0	991	13,645
lowa	3,023	11,301	0	5,370	19,694
Kansas and Nebraska	8,032	11,310	0	5,110	24,452
Kentucky	2,711	7,222	0	500	10,433
Louisiana	31,075	3,251	300,142	0	334,468
Minnesota	644	16,897	0	2,065	19,606
Mississippi	22,806	9,333	23,490	0	55,629
Missouri	4,661	8,682	0	0	13,343
New York, New Jersey, and					
Pennsylvania	12,950	705	0	0	13,655
Ohio	350	17,220	0	6,519	24,089
Oklahoma	0	0	0	113	113
Oregon	531	34	0	0	5 6 5
Texas	10,576	10,549	0	0	21,125
Washington	190	253	0	0	443
Wisconsin	0	<u> 1,532</u>	0	204	<u>1,736</u>
Total volume	223,786	191,907	349,657	58,856	824,206
Percentage of total volume	27.2	23.3	42.2	7.1	100.0

This column shows elevator receipts in each state from farmers located in all other states as reported by elevators in the receiving states.

Table 10. 1977 Movements of Soybeans to Points of Export for Each Originating State by Three Modes of Transportation

Originating	Export	Mo	de of transporta	ition	Total
state	region	Rail	Truck	Barge	10tai
		thousands of bushels			
Alabama and Tennessee	Gulf	3,402	1,766	26,530	31,698
Arkansas	Gulf	14,470	3,359	38,586	56,415
Delaware, Maryland, North Carolina,					
and Virginia	Atlantic	991	1,436	5,119	7,546
Florida, Georgia, and South Carolina	Atlantic	1,540	1,950	0	3,490
	Gulf	94	642	2,429	3,165
Illinois	Lakes	1,952	5,657	1,321	8,930
	Atlantic	1,447	0	0	1,447
	Gulf	3,713	0	107,548	111,261
Indiana	Lakes	350	12,307	0	12,657
	Atlantic	22,949	0	0	22,949
	Gulf	591	0	8,120	8,711
lowa	Lakes	2,664	641	0	3,305
	Atlantic	429	0	0	429
	Gulf	31,144	0	29,720	60,864
	Pacific	295	0	0	295
Kansas and Nebraska	Gulf	2,756	0	1,878	4,634
	Pacific	182	253	0	435
Kentucky	Gulf	21	0	11,393	11,414
Louisiana	Gulf	1,626	19,165	45,381	66,172
Michigan	Lakes	0	14,036	0	14,036
	Atlantic	4,055	0	0	4,055
Minnesota	Gulf	4,032	0	24,540	28,572
	Pacific	539	0	0	539
	Canada	0	193	0	193
Mississippi	Gulf	7,332	177	26,383	33,892
Missouri New York, New Jersey, and	Gulf	1,804	0	40,930	42,734
Pennsylvania	Atlantic	0	1,263	0	1,263
Ohio	Lakes	3,713	26,106	Ö	29,819
01110	Atlantic	26,077	0	Ö	26,077
	Gulf	164	0	10,496	10,660
Oklahoma	Gulf	0	0	2,250	2,250
South Dakota	Gulf	51	0	0	51
Coult Barota	Pacific	0	34	Ö	34
Texas	Gulf	2,283	7,469	Ö	9,752
Wisconsin	Lakes	1,432	3,015	0	4,447
	Gulf	0	0,01.0	1,350	1,350
Chicago area	Lakes	111	0	0	111
omougo arou	Atlantic	2,866	Ö	Ō	2,866
	Gulf	0	Ö	1,670	1,670
	Canada	669	202	0	871
All states	Lakes	10,222	68,738	1,321	80,281
	Atlantic	60,354	4,649	5,119	70,122
	Gulf	73,483	32,578	379,204	485,265
	Pacific	1,016	287	0	1,303
	Canada	669	395	Ö	1,064
Total volume		145,744	99,671	385,644	631,059
		*			





are shown in Table 12. In 1977 Japan purchased 140 million bushels or 24 percent of the total volume exported, making that nation the leading buyer of U.S. soybeans. The Netherlands, the second most important destination for U.S. soybeans, received 115 million bushels. Spain and the Federal Republic of Germany each purchased more than 40 million bushels, and Italy purchased 33 million bushels. Mexico ranked sixth in the volume of soybeans purchased, accounting for almost 30 million bushels.

RECEIPTS AND SHIPMENTS BY AREA

Estimates of the flow of soybeans by each mode of transportation and for every study region are presented in Tables 13–110. These estimates represent the most comprehensive and best data available on the volume of soybeans transported between each of the regions of the United States.

A detailed study of the flows will likely lead some readers to the conclusion that there are inefficiencies in the shipment of grain among states. Shipping soybeans in both directions between two states is one example of an apparent inefficiency in the marketing pattern. However, most of the shipments reported in this study reflect sellers' attempts to take advantage of profitable marketing opportunities that occur at a particular moment. It is not possible to provide a rationale for all of the movements without complete knowledge of daily price and transportation relationships. Local supply and demand vary throughout the marketing year, and buyers constantly seek the most economical supply source. Changes in supplies, demands, and transportation costs result in frequent changes in the most profitable shipping pattern.

The availability of storage space at harvest time is also an important factor in determining soybean

Table 11. 1977 Receipts of Soybeans at Port Areas by Each Mode of Transportation

Export region		Mode of tra			Inspec-	
and port area	Rail	Truck	Barge	Farm truck ^a	Total	tions for export ^b
GREAT LAKES REGION						
Duluth-Superior	0	0	0	0	0	0
Chicago	6,159	21,224	1,321	787	25,491	14,187
Toledo	4,063	39,390	0	3,342	46,795	47,088
Saginaw	0	1,148	0	0	1,148	1,317
Subtotal	10,222	61,762	1,321	4,129	77,434	62,592
ATLANTIC REGION						
North Atlantic	12,950	1,190	0	0	14,140	12,287
South Atlantic	47,404	3,459	5,119	800	56,782	53,218
Subtotal	60,354	4,649	5,119	800	70,922	65,505
GULF REGION						
East Gulf	31,652	4,889	33,731	850	71,122	68,225
Louisiana Gulf	31,230	10,799	345,473	0	387,502	368,153
North Texas Gulf	10,601	16,890	0	0	27,491	27,447
South Texas Gulf	0	0	0	0	0	0
Subtotal	73,483	32,578	379,204	850	486,115	463,825
PACIFIC REGION						
Columbia River	531	34	0	0	565	605
Puget Sound	190	253	0	0	443	17
California	295	0	0	0	295	295
Subtotal	1,016	287	0	0	1,303	917
Total receipts	145,075	99,276	385,644	5,779	635,774	592,839
Percentage of total receipts	22.8	15.6	60.7	0.9	100.0	0

Note: These data exclude shipments to Canada that are reported in Table 10.

^a This column reports grain delivered by farmers directly to elevators in each port area.

b Inspections for export conducted under the United States Grain Standards Act and reported in Grain Market News, Agricultural Marketing Service, U.S. Department of Agriculture, Vol. 26, No. 2 (January 13, 1978), p. 18.

Table 12. 1977 Exports of U.S. Soybeans from Canada and the United States by Port Region and Destination

			Export region	ו		
Destination	Canada	Great Lakes	Atlantic	Gulf	Pacific	Total
			thousands	of bushels		
Australia	0	0	0	534	0	534
Belgium	0	1,341	233	13,351	0	14,925
Canada ^a	0	10,717	0	0	0	10,717
China, Rep. of (Taiwan)	0	0	0	22,668	0	22,668
Cyprus	0	0	0	507	0	507
Denmark	150	2,625	3,217	7,711	0	13,703
Dominican Rep	0	0	0	704	0	704
Egypt	0	0	0	1,543	0	1,543
France Germany, Fed.	410	607	14,395	2,220	0	17,632
Rep. of (W)	0	4,022	926	36,903	0	41,851
Greece	0	1,344	0	1,124	0	2,468
Indonesia	1,012	0	1,750	2,348	0	5,110
Israel	0	0	5,493	9,464	0	14,957
Italy	288	0	4,480	28,563	0	33,331
Jamaica	0	0	0	770	0	770
Japan	6,284	12,534	8,384	112,216	859	140,277
Korea, Rep. of	638	0	917	5,205	0	6,760
Lebanon	0	434	0	173	0	607
Malaysia	0	0	0	0	58	58
Mexico	0	0	147	29,815	0	29,962
Morocco	0	971	0	4,504	0	5,475
Netherlands	1,203	3,760	5,256	104,587	0	114,806
Norway	0	1,600	0	6,093	0	7,693
Peoples Rep. of China .	282	591	0	1,148	0	2,021
Peru	0	0	0	961	0	961
Philippines	0	0	864	495	0	1,359
Portugal	0	0	1,480	4,455	0	5,935
Romania	0	0	0	6,266	0	6,266
Singapore	0	0	0	631	0	631
Spain	1,181	4,096	8,642	29,729	0	43,648
Thailand	0	0	2,403	0	0	2,403
United Kingdom	903	5,050	3,399	6,560	0	15,912
U.S.S.R	0	549	3,519	18,808	0	22,876
Venezuela	0	0	0	1,086	0	1,086
Yugoslavia	0	0	0	1,683	0	2,683
Total	12,351	50,241	65,505	463,825	917	592,839

Source: Canadian Grain Commission and data on inspections for export under the U.S. Grain Standards Act as reported in Grain Market News, Agricultural Marketing Service, U.S. Department of Agriculture, Vol. 26, No. 5 (February 3, 1978), pp. 11-15.

^a The quantity of grain inspected at U.S. ports for shipment to Canada is reduced by the amount of U.S. grain exported from Canadian ports as reported by the Canadian Grain Commission. It is assumed that this residual amount of grain is held in Canada for later export or consumption.

shipments. If local storage facilities are filled with corn when soybeans move from the farms, country elevators may be forced to ship soybeans to various terminal or processing locations for storage. Later in the year supplies in the local region may be exhausted, and processors in that area will begin purchasing soybeans from outside sources, reversing the earlier outbound flow. Many other factors, such as the availability of transportation, have a substantial impact on soybean movements. An in-

adequate supply of rail cars during periods of peak movement may force soybeans to flow in a pattern that is not the most economical.

A detailed analysis of the influence of these factors is beyond the scope of this publication. Readers interested in more detailed information about the types of firms involved in soybean movements and the seasonality of those movements should contact Agricultural Experiment Station representatives in the participating states.

TABLE 13. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 3000, ARKANSAS

ORIGINATING	:	MODE	OF TRAN	SPORTATI	ON :	
STATE OR PORT AREA	:	RAIL :	TRUCK :		FARM :	TOTAL
			(THOUSAN	DS OF BU	SHELS)	
2256 ILLINDIS		0	0	2440	0	2440
2260 ILLINOIS		0	0	1560	0	1560
2500 MISSISSIPPI		0	645	0	0	645
2900 MISSOURI		2905	1919	0	5350	10174
3000 ARKANSAS		17468	43179	0	103070	163717
3100 LOUISIANA		0	0	0	900	900
3600 OKLAHOMA		0	0	0	1200	1200
3745 TEXAS		0	75	0	0	75
6600 KS & NE		1500	0	0	0	1500
TOTAL VOLUME	-	21873	45818	4000	110520	182211

TABLE 14. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 3000, ARKANSAS

			=======	======	
DESTINATION	E COM	OF TRAN	SPORTATI	ON :	
STATE OR PORT AREA	RAIL	: TRUCK :	BARGE :	FARM : TRUCK :	TOTAL
		(THOUSAN	DS OF BU	SHELS)	
2500 MISSISSIPPI	0	1523	0	0	1523
2900 MISSOURI	0	803	0	0	803
3000 ARKANSAS	17468	43179	0	0	60647
3100 LOUISIANA	0	853	0	0	853
3745 TEXAS	46	141	0	0	187
6500 AL & TN	178	631	0	0	809
7301 EAST GULF	8163	2370	12713	0	23246
7302 LOUISIANA GULF	6149	989	25873	0	33011
7303 ND. TEXAS GULF	158	0	0	0	158
TOTAL VOLUME	32162	50489	38586	0	121237

TABLE 15. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2256, ILLINOIS

ORIGINATING	:	MODE	OF TRAN	SPORTAT	ON :	
STATE OR PORT AREA		RAIL :	TRUCK :	BARGE :	FARM TRUCK	TOTAL
			(THOUSAN	DS OF BU	JSHELS)	
1901 INDIANA		0	94	0	0	94
2100 WISCONSIN		0	541	0	165	706
2256 ILLINOIS		0	25680	0	45699	71379
2257 ILLINOIS		0	4262	0	6940	11202
2260 ILLINDIS		0	362	0	1139	1501
2261 ILLINOIS		0	53	0	227	280
2270 ILLINDIS		0	49	0	27	76
2802 IOWA		69	0	0	0	69
2803 IOWA		0	614	0	58	672
7102 CHICAGO AREA		0	200	0	0	200
TOTAL VOLUME		69	31855	0	54255	86179

TABLE 16. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 2256, ILLINOIS

		TOT TOAN	COORTATI	oni •	======
DESTINATION	. mubi	E OF TRAN		!	
STATE OR PORT AREA		: :	:	FARM :	TOTAL
	: RAIL	: TRUCK :	BARGE :	TRUCK:	
		(THOUSAN	DS OF BU	SHELS)	
2256 ILLINOIS	0	25680	0	0	25680
2260 ILLINDIS	0	2807	0	0	2807
2270 ILLINOIS	0	2609	0	0	2609
2803 IDWA	0	116	0	0	116
3000 ARKANSAS	0	0	2440	0	2440
6500 AL & TN	0	0	4321	0	4321
7102 CHICAGO AREA	1452	4769	1321	0	7542
7301 EAST GULF	0	0	2000	0	2000
7302 LOUISIANA GULF	0	0	36158	0	36158
TOTAL VOLUME	1452	35981	46240	0	83673

TABLE 17. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2257, ILLINOIS

	===					
	:	MODE	OF TRANS	SPORTATI	ON :	
ORIGINATING STATE OR PORT AREA	:	RAIL :	TRUCK:		FARM :	TOTAL
			(THOUSAN	os of Bu	SHELS)	
1901 INDIANA		1456	2894	0	1931	6281
1902 INDIANA		15	5246	0	0	5261
1903 INDIANA		164	0	0	0	164
2100 WISCONSIN		0	30	0	0	30
2256 ILLINOIS		0	0	0	5	5
2257 ILLINOIS		2010	8972	0	38533	49515
2258 ILLINOIS		512	971	0	2	1485
2260 ILLINOIS		0	178	0	19	197
2270 ILLINOIS		0	3604	0	631	4235
TOTAL VOLUME		4157	21895	0	41121	67173

TABLE 18. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 2257, ILLINOIS

	===:		=======	======		
DESTINATION STATE OR PORT AREA	-	MODE				
		RAIL :	TRUCK :		FARM : TRUCK :	TOTAL
			(THOUSAND	S OF BUS	SHELS)	
1902 INDIANA		500	370	0	0	870
1903 INDIANA		192	0	0	0	192
2256 ILLINOIS		0	4262	0	0	4262
2257 ILLINOIS		2010	8972	0	0	10982
2258 ILLINDIS		0	282	0	0	282
2260 ILLINOIS		0	178	0	0	178
2270 ILLINOIS		1524	9967	0	0	11491
3100 LOUISIANA		500	0	0	0	500
7102 CHICAGO AREA		500	888	0	0	1388
7202 SOUTH ATLANTIC		1112	0	0	0	1112
7302 LOUISIANA GULF	_	1135	0	0	0	1135
TOTAL VOLUME		7473	24919	0	0	32392

TABLE 19. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2258, ILLINOIS

	===		=======			
ORIGINATING STATE OR PORT AREA	:	MODE	ON :			
	:	RAIL :	TRUCK :	BARGE :	FARM :	TOTAL
			(THOUSAN	DS OF BU	SHELS)	
1902 INDIANA		0	12	0	0	12
2257 ILLINOIS		0	282	0	0	282
2258 ILLINOIS		924	10822	0	54435	66181
2259 ILLINOIS		19	226	0	3000	3245
2260 ILLINDIS		0	2493	0	0	2493
2261 ILLINOIS		0	81	0	0	81
2262 ILLINOIS		0	0	0	3000	3000
2270 ILLINOIS		28	2074	0	0	2102
TOTAL VOLUME	,	971	15990	0	60435	77396

TABLE 20. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 2258, ILLINOIS

DESTINATION STATE OR PORT AREA	: M	MODE OF TRANSPORTATION					
	RAI	L	: TRUCK :		FARM TRUČK:	TOTAL	
			(THOUSANI	OS OF BU	SHELS)		
1901 INDIANA	1	65	0	0	0	165	
1902 INDIANA	6	45	0	0	0	645	
1903 INDIANA		0	5150	0	0	5150	
2257 ILLINOIS	5	12	971	0	0	1483	
2258 ILLINOIS	9	24	10822	0	0	11746	
2259 ILLINOIS		0	396	0	0	396	
2260 ILLINOIS		0	1736	0	0	1736	
2261 ILLINOIS		0	4474	0	0	4474	
2262 ILLINOIS	3	96	1749	0	0	2145	
2270 ILLINOIS	10		29783	0	0	30840	
2900 MISSOURI	11		1970	0	0	3138	
6500 AL & TN	1		0	0	0	110	
7202 SOUTH ATLANTIC		35	0	0	0	335	
7302 LOUISIANA GULF	= = = = = = = = = = = = = = = = = = = =	47	0	0	0	647	
TOTAL VOLUME	59	59	57051	0	0	63010	

TABLE 21. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2259, ILLINOIS

ORIGINATING STATE OR PORT AREA	MODE				
	RAIL	TRUCK	-	FARM TRUCK	
		(THOUSAN	DS OF BII		
		(I I I I I I I I I I I I I I I I I I I	<i>D</i> 3 0, 60	JHEE37	
1903 INDIANA	0	0	0	10	10
225B ILLINOIS	0	396	0	132	528
2259 ILLINOIS	0	2142	0	11379	13521
2262 ILLINDIS	0	0	0	1500	1500
TOTAL VOLUME	0	253B	0	13021	15559

TABLE 22. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 2259, ILLINOIS

DESTINATION STATE OR PORT AREA	MODE	MODE OF TRANSPORTATION				
	RAIL	TRUCK :	-	FARM TRUCK	TOTAL	
		(THOUSANI	DS OF BU	SHELS)		
1903 INDIANA	0	72	0	0	72	
2258 ILLINDIS	19	226	0	0	245	
2259 ILLINOIS	0	2142	0	0	2142	
2261 ILLINDIS	0	710	0	0	710	
2262 ILLINDIS	0	56	0	0	56	
2270 ILLINDIS	252	15	0	0	267	
6400 FL, GA & SC	1687	0	0	0	1687	
6500 AL & TN	5004	0	0	0	5004	
7301 EAST GULF	621	0	0	0	621	
7302 LOUISIANA GULF	0	0	3483	0	3483	
7303 NO. TEXAS GULF	320	0	0	0	320	
TOTAL VOLUME	7903	3221	3483	0	14607	

TABLE 23. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2260, ILLINOIS

ORIGINATING STATE OR PORT AREA	:	MODE	OF TRAN	SPORTAT	. NO	
	:	RAIL	: TRUCK :	BARGE	FARM TRUCK	TOTAL
			(THOUSAN	DS OF BU	JSHELS)	-
2100 WISCONSIN		0	30	0	0	30
2256 ILLINOIS		0	2807	0	91	2898
2257 ILLINDIS		0	178	0	35	213
2258 ILLINDIS		0	1736	0	12373	14109
2260 ILLINDIS		5	19979	0	28694	48678
2261 ILLINOIS		0	2873	0	2478	5351
2270 ILLINOIS		0	2786	0	3195	5981
2801 IDWA		0	159	0	0	159
2802 IDWA		0	212	0	0	212
2803 IDWA		0	958	0	0	958
TOTAL VOLUME		5	31718	0	46866	78589

TABLE 24. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 2260, ILLINOIS

DECTINATION	: MODE	OF TRAN	SPORTATI	DN :	======
DESTINATION STATE OR PORT AREA	RAIL	TRUCK :	BARGE :	FARM : TRUCK :	TOTAL
		(THOUSAN	DS OF BU	SHELS)	
2256 ILLINDIS	0	362	0	0	362
2257 ILLINOIS	0	178	0	0	178
2258 ILLINOIS	0	2493	0	0	2493
2260 ILLINOIS	5	19979	0	0	19984
2261 ILLINOIS	0	1242	0	0	1242
2262 ILLINOIS	0	7888	0	0	7888
2270 ILLINOIS	533	1617	0	0	2150
2900 MISSOURI	0	2589	0	0	2589
3000 ARKANSAS	0	0	1560	0	1560
6500 AL & TN	0	0	3069	0	3069
7301 EAST GULF	0	0	6528	0	6528
7302 LOUISIANA GULF	0	0	23614	0	23614
TOTAL VOLUME	538	36348	34771	0	71657

TABLE 25. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2261, ILLINOIS

ORIGINATING	:	MODE	OF TRANS	SPORTAT	ION	
STATE OR PORT AREA	:	RAIL :	TRUCK	BARGE	: FARM : TRUCK	TOTAL
			(THOUSAN)	DS OF 8	USHELS)	
2258 ILLINOIS		0	4474	0	241	4715
2259 ILLINOIS		0	710	0	0	710
2260 ILLINOIS		0	1242	0	1281	2523
2261 ILLINOIS		0	2838	0	17019	19857
2262 ILLINOIS		99	1198	0	0	1297
2270 ILLINOIS		0	72	0	0	72
2801 IDWA		1286	239	0	0	1525
2802 IOWA		1624	260	0	0	1884
2803 IOWA		0	2412	0	1111	3523
2900 MISSOURI		3698	15859	0	3110	22667
TOTAL VOLUME	•	6707	29304	0	22762	58773

TABLE 26. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 2261, ILLINOIS

DESTINATION	: MODE	OF TRANS	SPORTATIO	DN :	
STATE OR PORT AREA	RAIL	TRUCK :	BARGE	FARM TRUCK	TOTAL
		(THOUSAN)	os of Bu	SHELS)	
2256 ILLINOIS	0	53	0	0	53
2258 ILLINOIS	0	81	0	0	81
2260 ILLINDIS	0	2873	0	0	2873
2261 ILLINOIS	0	2838	0	0	2838
2262 ILLINOIS	136	1520	0	0	1656
2270 ILLINOIS	1416	180	0	0	1596
2803 IDWA	0	4	0	0	4
7302 LOUISIANA GULF	0	0	13042	0	13042
TOTAL VOLUME	1552	7549	13042	0	22143

TABLE 27. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2262, ILLINDIS

ORIGINATING	:	MODE	OF TRANS	SPORTATIO	DN :	
STATE OR PORT AREA	:	RAIL :	: TRUCK :		FARM :	TOTAL
A.			(THOUSANI	os of Bu	SHELS)	
2257 ILLINOIS		0	0	0	379	379
2258 ILLINOIS		396	1749	0	414	2559
2259 ILLINOIS		0	56	0	3344	3400
2260 ILLINDIS		0	7888	0	0	7888
2261 ILLINDIS		136	1520	0	296	1952
22G2 ILLINOIS		316	4598	0	17112	22026
2300 KENTUCKY		0	0	0	741	741
2900 MISSOURI		43	1557	0	2236	3836
TOTAL VOLUME		891	17368	0	24522	42781

TABLE 28. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 2262, ILLINOIS

BEOTIMATION	: MODE	OF TRAN	SPORTATI	ON	
DESTINATION STATE OR PORT AREA	RAIL	TRUCK :	-	FARM TRUCK	TOTAL
		(THOUSAN	DS OF BU	SHELS)	
2261 ILLINOIS	99	1198	0	0	1297
2262 ILLINOIS	316	4598	0	0	4914
2270 ILLINOIS	0	375	0	0	375
2300 KENTUCKY	27	0	0	0	27
2900 MISSOURI	0	18	0	0	18
3100 LOUISIANA	9	0	0	0	9
6400 FL, GA & SC	250	0	0	0	250
6500 AL & TN	7709	0	3150	0	10859
7301 EAST GULF	685	0	1400	0	2085
7302 LOUISIANA GULF	305	0	21323	0	21628
TOTAL VOLUME	9400	6189	25873	0	41462

TABLE 29. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2270, ILLINOIS

	:					
ORIGINATING	:	MODE	OF TRANS	SPORTATI	DN :	
STATE OR PORT AREA	:	RAIL :	TRUCK :	BARGE:	FARM : TRUCK :	TOTAL
			(THOUSANI	DS OF BU	SHELS)	
2256 ILLINOIS		0	2609	0	0	2609
2257 ILLINOIS		1524	9967	0	2809	14300
2258 ILLINOIS		1057	29783	0	2859	33699
2259 ILLINDIS		252	15	0	2000	2267
2260 ILLINDIS		533	1617	0	1273	3423
2261 ILLINOIS		1416	180	0	0	1596
2262 ILLINOIS		0	375	G	G	375
2270 ILLINOIS		1770	19755	0	21629	43154
TOTAL VOLUME	•	6552	64301	0	30570	101423

TABLE 30. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 2270, ILLINOIS

DESTINATION	:	MODE	OF TRAN	======= SPORTATI(DN :	=====
STATE OR PORT AREA	:	RAIL:	TRUCK :			TOTAL
			(THOUSAN	DS OF BU	SHELS)	
2256 ILLINOIS		0	49	0	0	49
2257 ILLINOIS		0	3604	0	0	3604
2258 ILLINOIS		28	2074	0	0	2102
2260 ILLINDIS		0	2786	0	0	2786
2261 ILLINOIS		0	72	0	0	72
2270 ILLINOIS		1770	19755	0	0	21525
6400 FL, GA & SC		600	0	0	0	600
TOTAL VOLUME		2398	28340	0	0	30738

TABLE 31. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 1901, INDIANA

ORIGINATING	:	MODE	OF TRANS	SPORTATI	ON :	
STATE OR PORT AREA	:	RAIL:	TRUCK :		FARM : TRUCK :	TOTAL
			(THOUSANI	DS OF BU	SHELS)	
1825 OHIO		0	62	0	0	62
1850 DHIO		0	4364	0	0	4364
1901 INDIANA		73	14828	0	59771	74672
1902 INDIANA		0	3153	0	11758	14911
2000 MICHIGAN		0	501	0	0	501
2258 ILLINDIS		165	0	0	0	165
7102 CHICAGO AREA		393	0	0	0	393
TOTAL VOLUME	•	631	22908	0	71529	95068

TABLE 32. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 1901, INDIANA

=======================================	:=:	:======	=======	======	======	======
DESTINATION	:	MODE	OF TRANS	SPORTATI	ON :	
STATE OR PORT AREA	:	RAIL :	TRUCK :	BARGE :	FARM : TRUCK :	TOTAL
			(THOUSAN)	DS OF BU	SHELS)	
1901 INDIANA		73	14828	0	0	14901
1902 INDIANA 2256 ILLINDIS		0	11242 94	0	0	11242
2257 ILLINDIS 2300 KENTUCKY		1456 0	2894 44	0	0	4350 44
7102 CHICAGO AREA 7103 TOLEDO AREA		0 350	9538 1774	0	0	9538 2124
7202 SOUTH ATLANTIC 7301 EAST GULF		4727 212	0	0	0	4727 212
TOTAL VOLUME		6818	40414	0	0	47232

TABLE 33. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 1902, INDIANA

ORIGINATING		MODE	מס			
STATE OR PORT AREA	:	RAIL :	TRUCK :		FARM :	TOTAL
			(THOUSAN	DS OF BU	SHELS)	
1825 OHIO		0	22	0	0	22
1850 OHIO 1901 INDIANA		0	189 11242	0	0 11758	189 23000
1902 INDIANA 1903 INDIANA		0	22758 522	0	51848	74606
2256 ILLINOIS		o	0	0	618 464	1140 464
2257 ILLINOIS 2258 ILLINOIS		500 645	370 0	0	171 0	1041 645
TOTAL VOLUME		1145	35103	0	64859 	101107

TABLE 34. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 1902, INDIANA

DESTINATION STATE OR PORT AREA	: MODI	E OF TRAN	SPORTATI	ON :	
	RAIL	TRUCK	_	FARM : TRUCK :	TOTAL
		(THOUSAN	DS OF BU	SHELS)	
1825 OHIO	0	3214	0	0	3214
1901 INDIANA	0	3153	0	0	3153
1902 INDIANA	0	22758	0	0	22758
1903 INDIANA	0	294	0	0	294
2257 ILLINOIS	15	5246	0	0	5261
2258 ILLINOIS	0	12	0	0	12
2300 KENTUCKY	0	1259	0	0	1259
6300 DE, MD, NC & VA	3	0	0	0	3
7102 CHICAGO AREA	0	995	0	0	995
7201 NORTH ATLANTIC	2055	0	0	0	2055
7202 SOUTH ATLANTIC	16167	0	0	0	16167
TOTAL VOLUME	18240	36931	0	0	55171

TABLE 35. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 1903, INDIANA

ORIGINATING		MODE	OF TRAN	SPORTATI	ON :	
STATE OR PORT AREA	:	RAIL :	TRUCK :	=	FARM : TRUCK :	TOTAL
			(THOUSAN	DS OF BU	SHELS)	
1902 INDIANA		0	294	0	176	470
1903 INDIANA		100	4818	0	12347	17265
2257 ILLINOIS		192	0	0	0	192
2258 ILLINOIS		0	5150	0	282	5432
2259 ILLINOIS		0	72	0	71	143
2300 KENTUCKY		0	0	0	3	3
2705 MINNESOTA		0	29	0	0	29
TOTAL VOLUME	•	292	10363	0	12879	23534

TABLE 36. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 1903, INDIANA

		========	======	========	======
BECTINATION .	MODE	OF TRANS	SPORTATI	ON :	
DESTINATION : STATE OR PORT AREA :	RAIL	TRUCK :			TOTAL
		(THOUSAN	DS OF BU	SHELS)	
1825 OHIO	0	722	0	0	722
1902 INDIANA	0	522	0	0	522
1903 INDIANA	100	4818	0	0	4918
2257 ILLINOIS	164	0	0	0	164
2300 KENTUCKY	2684	5495	0	0	8179
6300 DE, MD, NC & VA	316	0	0	0	316
6400 FL, GA & SC	3451	0	0	0	3451
6500 AL & TN	1272	0	475	0	1747
7301 EAST GULF	329	0	87	0	416
7302 LOUISIANA GULF	50	0	8033	0	8083
TOTAL VOLUME	8366	11557	8595	0	28518

TABLE 37. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2801, IOWA

ORIGINATING		MODE	OF TRAN	SPORTATI	ON	
STATE OR PORT AREA	:	RAIL:	TRUCK :	BARGE :		TOTAL
			(THOUSAN	NDS OF BU	SHELS)	
2703 MINNESOTA		0	4097	0	0	4097
2801 IOWA		569	29347	0	107854	137770
2802 IOWA		0	423	0	0	423
3300 SOUTH DAKOTA		1573	4626	0	0	6199
6600 KS & NE		503	1426	0	5370	7299
TOTAL VOLUME		2645	39919	0	113224	155788

TABLE 38. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 2801, IOWA

=======================================	: MODI	====== E OF TRAN	SPORTATI	====== ON :	======
DESTINATION STATE OR PORT AREA	RAIL	TRUCK		FARM TRUCK	TOTAL
		(THOUSAN	DS OF BU	SHELS)	
2260 ILLINDIS 2261 ILLINDIS 2703 MINNESOTA 2705 MINNESOTA 2801 IOWA 2802 IOWA 2803 IOWA 2900 MISSOURI 3100 LOUISIANA 6600 KS & NE 7102 CHICAGO AREA 7202 SOUTH ATLANTIC 7301 EAST GULF 7302 LOUISIANA GULF	0 1286 99 0 569 1938 790 1152 109 168 2040 377 2338 12260	159 239 4287 3038 29347 14928 1468 1067 0 8728	0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	159 1525 4386 3038 29916 16866 2258 2219 109 8896 2040 377 2338 13108
7303 NO. TEXAS GULF 7403 CALIFORNIA	4150 295	0	0	0	4150 295
TOTAL VOLUME	27571	63261	848	0	91680

TABLE 39. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2802, IOWA

ORIGINATING	MODE	OF TRAN	SPORTATI	ON :	
STATE OR PORT AREA	RAIL	TRUCK :		FARM TRUCK	TOTAL
		(THOUSAN	DS OF BU	SHELS)	
2100 WISCONSIN	0	156	0	0	156
2703 MINNESOTA	929	413	0	0	1342
2801 IOWA	1938	14928	0	0	16866
2802 IOWA	2925	50373	0	82683	135981
2803 IOWA	0	2218	0	0	2218
TOTAL VOLUME	5792	68088	0	82683	156563

TABLE 40. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 2802, IOWA

	=======================================	. = = = = = = :	======		======
	: MODE	OF TRANS	SPORTATIO	ON :	
DESTINATION STATE OR PORT AREA		:	: :	FARM :	TOTAL
	: RAIL	TRUCK :			
		(THOUSAN)	DS OF BUS	SHELS)	
2256 ILLINOIS	69	0	0	0	69
2260 ILLINDIS	0	212	0	0	212
2261 ILLINOIS	1624	260	0	0	1884
2703 MINNESOTA	0	1527	0	0	1527
2705 MINNESOTA	0	2000	0	0	2000
2801 IDWA	0	423	0	0	423
2802 IDWA	2925	50373	0	0	53298
2803 IDWA	3603	6343	0	0	9946
2900 MISSOURI	517	384	0	0	901
6600 KS & NE	0	29	0	0	29
7102 CHICAGO AREA	624	194	0	0	818
7202 SOUTH ATLANTIC	52	0	0	0	52
7301 EAST GULF	3782	0	0	0	3782
7302 LOUISIANA GULF	6208	0	0	0	6208
7303 NO. TEXAS GULF	1876	0	0	0	1876
TOTAL VOLUME	21280	61745	0	0	83025

TABLE 41. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2803, IOWA

COLCINATING		MODE	OF TRANS	SPORTATI	ON :	
ORIGINATING STATE OR PORT AREA	:	RAIL:	TRUCK :	_	FARM : TRUCK :	TOTAL
			(THOUSANI	os of Bu	SHELS)	
2100 WISCONSIN		0	132	O	0	132
2256 ILLINOIS		0	116	0	0	116
2261 ILLINOIS		0	4	0	0	4
2703 MINNESOTA		18	331	0	0	349
2801 IOWA		790	1468	0	0	2258
2802 IOWA		3603	6343	0	0	9946
2803 IOWA		2440	43587	0	45025	91052
TOTAL VOLUME		6851	51981	0	45 025	103857

TABLE 42. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 2803, IOWA

	========	======	======		======
DESTINATION	: MODE	OF TRANS	SPORTATI	ON :	
STATE OR PORT AREA	RAIL	TRUCK :	-	FARM :	TOTAL
		(THOUSAN	DS OF BU	SHELS)	
2100 WISCONSIN	0	946	0	0	946
2256 ILLINOIS	0	614	0	0	614
2260 ILLINDIS	0	958	0	Q	958
2261 ILLINOIS	0	2412	0	0	2412
2705 MINNESOTA	0	150	0	Q	150
2802 IOWA	0	2218	0	0	2218
2803 IOWA	2440	43587	0	0	46027
2900 MISSOURI	0	534	0	0	534
6500 AL & TN	0	0	587	0	587
7102 CHICAGO AREA	0	447	0	0	447
7301 EAST GULF	88	0	403	0	491
7302 LOUISIANA GULF	341	0	28469	0	28810
7303 NO. TEXAS GULF	101	0	0	0	101
TOTAL VOLUME	2970	51866	29459	0	84295

TABLE 43. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2300, KENTUCKY

ORIGINATING		MODE	OF TRAN	SPORTATI	ON :	
STATE OR PORT AREA	:	RAIL :	TRUCK :	BARGE :	FARM : TRUCK :	TOTAL
			(THOUSAN	DS OF BU	SHELS)	
1825 OHIO		0	324	0	0	324
1901 INDIANA		0	44	0	0	44
1902 INDIANA		0	1259	0	0	1259
1903 INDIANA		2684	5495	0	500	8679
2262 ILLINOIS		27	0	0	0	27
2300 KENTUCKY		80	2434	0	28805	31319
6500 AL & TN		0	100	0	0	100
TOTAL VOLUME		2791	9656	0	29305	41752

TABLE 44. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 2300, KENTUCKY

BECTINATION	: MOD	E OF TRAN	SPORTATIO	DN :	======
DESTINATION STATE OR PORT AREA	RAIL	: : TRUCK :	=	FARM : TRUCK :	TOTAL
		(THOUSAN	DS OF BU	SHELS)	
2300 KENTUCKY	80	2434	0	0	2514
2500 MISSISSIPPI	179	0	0	0	179
6300 DE, MD, NC & VA	2426	0	0	0	2426
6400 FL, GA & SC	225	0	0	0	225
6500 AL & TN	3594	1831	287	0	5712
7302 LOUISIANA GULF	21	. 0	11393	0	11414
TOTAL VOLUME	6525	4265	11680	0	22470

TABLE 45. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 3100, LOUISIANA

ORIGINATING		MODE	OF TRAN	SPORTATI	ON :	
STATE OR PORT AREA	:	RAIL :	TRUCK :	=	FARM : TRUCK :	TOTAL
			(THOUSAN	DS OF BU	SHELS)	
2257 ILLINOIS		500	0	0	0	500
2262 ILLINOIS 2500 MISSISSIPPI		9 750	0 1343	0 50	0	9 2143
2801 IDWA 3000 ARKANSAS		109	0 853	0	0	109 853
3100 LOUISIANA 6600 KS & NE		0 90	17611 0	0	66563 0	84174 90
TOTAL VOLUME		1458	19807	50 	66563	87878

TABLE 46. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 3100, LOUISIANA

DESTINATION	MODE	OF TRAN	SPORTATI	ON :	
STATE OR PORT AREA	RAIL	TRUCK :	BARGE :		TOTAL
		(THOUSAN	DS OF BU	SHELS)	
2500 MISSISSIPPI	0	3377	0	0	3377
3100 LOUISIANA	0	17611	0	0	17611
7302 LOUISIANA GULF	1613	9744	45381	0	56738
7303 NO. TEXAS GULF	13	9421	0	0	9434
TOTAL VOLUME	1626	40153	45381	0	87160

TABLE	47.	1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY	1
		FIRMS IN AREA 2000, MICHIGAN	

	:== :	MODE	OF TRANS	SPORTATIO	====== DN :	======
ORIGINATING STATE OR PORT AREA		RAIL:	TRUCK :		FARM : TRUCK :	TOTAL
			(THOUSANI	os of Bu	SHELS)	
2000 MICHIGAN		0	530	o	21038	21568
TOTAL VOLUME		0	530	0	21038	21568
TABLE 48. 1977 SOY		AN SHIPME			DESTINAT	IONS BY
	:==	MODE	OF TRANS	SPORTATI	 NN :	======
DESTINATION STATE OR PORT AREA	:	:	TRUCK :	:	FARM :	TOTAL
			(THOUSAN)	os of Bu	SHELS)	
1901 INDIANA 2000 MICHIGAN 7102 CHICAGO AREA 7103 TOLEDO AREA			501 530 1378 11510	0 0 0	0	
7104 SAGINAW AREA 7201 NORTH ATLANTIC 7202 SOUTH ATLANTIC		0 2055 2000	1148 0 0	0 0 0		1148 2055 2000
TOTAL VOLUME		4055			- -	
TABLE 49. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2701, MINNESOTA						
ORIGINATING	:	MODE	OF TRANS	SPORTATI	DN :	
STATE OR PORT AREA	:	RAIL:			FARM : TRUCK :	TOTAL
			(THOUSAN	DS OF BU	SHELS)	
2701 MINNESOTA		0	2	0	344	346

TOTAL VOLUME

TABLE 50. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 2701, MINNESOTA

DESTINATION	:	MODE	OF TRAN	SPORTATI	GN	
STATE OR PORT AREA	:	RAIL	TRUCK :			TOTAL
			(THOUSAN	DS OF BU	SHELS)	
2701 MINNESOTA		0	2	0	0	2
2703 MINNESOTA		0	274	0	0	274
2705 MINNESOTA		17	601	. 0	0	618
9000 EXPORT		0	157	0	0	157
TOTAL VOLUME		17	1034	0	0	1051

TABLE 51. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2703, MINNESOTA

=======================================	=====	====	======	====	======	======	======
GRIGINATING		MODE	OF TRA	NSPO	RTATIO	אכ	
STATE OR PORT AREA	R	: AIL :	TRUCK	: : BA		FARM : TRUCK :	TOTAL
			(THOUSA	NDS	of Bus	SHELS)	
2701 MINNESOTA		0	274	,	0	0	274
2703 MINNESOTA		851	33309	3	0	93012	127172
2705 MINNESOTA		0	()	0	30	30
2801 IOWA		99	4287	7	0	0	4386
2802 IOWA		0	1527	7	0	2039	3566
3200 NORTH DAKOTA		0	875	5	0	0	875
3300 SOUTH DAKOTA		59	945	5	0	0	1004
TOTAL VOLUME		1009	41217	,	0	95081	137307

TABLE 52. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 2703, MINNESOTA

DESTINATION	MODE	OF TRANS	SPORTATI	ON :	
STATE OR PORT AREA	RAIL	: TRUCK :	BARGE :	FARM :	TOTAL
		(THOUSAN	DS OF BU	SHELS)	
2703 MINNESUTA	851	33309	0	90	34250
2705 MINNESOTA	5782	24414	0	0	30196
2801 IDWA	0	4097	0	0	4097
2802 IOWA	929	413	0	0	1342
2803 IOWA	18	331	0	0	349
7301 EAST GULF	3636	0	0	0	3636
7303 NO. TEXAS GULF	396	0	0	0	396
7401 COLUMBIA RIVER	349	0	0	0	349
7402 PUGET SOUND	190	0	0	0	190
9000 EXPORT	0	36	0	0	36
TOTAL VOLUME	12151	62600	0	90	74841

TABLE 53. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2705, MINNESOTA

	===	=======	========	======	=======	=======
ORIGINATING	:	MODE	OF TRANS	SPORTAT	TION	:
STATE OR PORT AREA	:	RAIL :	TRUCK :	BARGE	: FARM : TRUCK	TOTAL
			(THOUSANI	S OF E	BUSHELS)	
2100 WISCONSIN		178	726	(0	904
2701 MINNESOTA		17	601	() 0	618
2703 MINNESOTA		5782	24414	(875	31071
2705 MINNESOTA		276	8955		11470	20701
2801 IOWA		0	3038	() 0	3038
2802 IOWA		0	2000	0	9	2009
2803 IDWA		0	150	0	17	167
3200 NORTH DAKOTA		17	2990	0	0	3007
3300 SOUTH DAKOTA		291	426	C	0	717
TOTAL VOLUME	•	6561	43300	0	12371	62232

TABLE 54. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 2705, MINNESOTA

DECTINATION:	:	MODE	OF TRAN	SPORTATI	ON :	
DESTINATION STATE OR PORT AREA	:	RAIL :	: TRUCK :	BARGE :	FARM :	TOTAL
			(THOUSAN	DS OF BU	SHELS)	
1903 INDIANA		0	29	0	0	29
2100 WISCONSIN		0	586	0	0	586
2500 MISSISSIPPI		0	0	50	0	50
2705 MINNESOTA		276	8955	0	0	9231
7301 EAST GULF		0	0	50	0	50
7302 LOUISIANA GULF		0	0	24490	0	24490
TOTAL VOLUME		276	9570	24590	0	34436

TABLE 55. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2500, MISSISSIPPI

ORIGINATING	:	MODE	OF TRAN	SPORTATI	ON :	
STATE OR PORT AREA	: :	RAIL	TRUCK :	-	FARM TRUCK	TOTAL
			(THOUSAN	DS OF BU	SHELS)	· _
2300 KENTUCKY		179	0	0	0	179
2500 MISSISSIPPI		3419	18519	0	70805	92743
2705 MINNESOTA		0	0	50	0	50
3000 ARKANSAS		0	1523	0	0	1523
3100 LOUISIANA		0	3377	0	0	3377
6400 FL, GA & SC		103	0	0	0	103
6500 AL & TN		2600	1257	0	0	3857
TOTAL VOLUME		6301	24676	50	70805	101832

TABLE 56. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 2500, MISSISSIPPI

DECTINATION	:	MODE	OF TRAN	SPORTATIO	DN :	
DESTINATION STATE OR PORT AREA	:	RAIL :	TRUCK :		FARM TRUCK	TOTAL
			(THOUSAN	DS OF BU	SHELS)	
2500 MISSISSIPPI		3419	18519	0	0	21938
3000 ARKANSAS		0	645	0	0	645
3100 LOUISIANA		750	1343	50	0	2143
6500 AL & TN		755	2593	0	0	3348
7301 EAST GULF		5330	111	144	0	5585
7302 LOUISIANA GULF		2002	66	26239	0	28307
TOTAL VOLUME		12256	23277	26433	0	61966

TABLE 57. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2900, MISSOURI

	===	======	=======	======	======	======
ORIGINATING	:	MODE	OF TRANS	PORTATI	ON :	
STATE OR PORT AREA	:	RAIL :	TRUCK :		FARM : TRUCK :	TOTAL
			(THOUSAND	S OF BU	SHELS)	
2258 ILLINOIS		1168	1970	0	0	3138
2260 ILLINOIS		0	2589	0	0	2589
2262 ILLINOIS		0	18	0	0	18
2801 IOWA		1152	1067	0	0	2219
2802 IOWA		517	384	0	0	901
2803 IDWA		0	534	0	0	534
2900 MISSOURI		23299	19495	3205	74121	120120
3000 ARKANSAS		0	803	0	0	803
6600 KS & NE		1824	1317	0	0	3141
TOTAL VOLUME		27960	28177	3205	74121	133463

TABLE 58. 1977 SOY	BEAN SHIPM AREA 2900			DESTINAT	IONS BY
	========				======
DESTINATION STATE OR PORT AREA		TRUCK :		FARM : TRUCK :	TOTAL
		(THOUSANI	DS OF BU	SHELS)	
2261 ILLINDIS 2262 ILLINDIS 2900 MISSOURI 3000 ARKANSAS 6500 AL & TN 6600 KS & NE 7301 EAST GULF 7302 LOUISIANA GULF		19495 1919 0 1705	0 3205 0 2000	0 0 0	19557 1600 45999 4824 2277 8332 728 40777
7303 NO. TEXAS GULF		Ŏ			1229
TOTAL VOLUME	38653	40535	46135	0	125323
TABLE 59. 1977 SOYI FIRMS IN STATE OR PORT AREA	AREA 4100		KICO SPORTATIO	ON :	
		(THOUSANI	S OF BUS	SHELS)	
4100 NEW MEXICO	0	0	0	3	3
TOTAL VOLUME	0	0	0	3	3
TABLE 60. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 4100, NEW MEXICO					
		THOUSAND			
3700 TEXAS	0		0	0	3
TOTAL VOLUME	0	3	0	0	3

TABLE 61. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 3200, NORTH DAKOTA

ORIGINATING	: MODE OF TRANSPORTATION					=====
STATE OR PORT AREA	:	RAIL:	TRUCK :		FARM : TRUCK :	TOTAL
			(THOUSAN	DS OF BU	SHELS)	
3200 NORTH DAKOTA		0	0	0	3882	3882
TOTAL VOLUME		0	0	0	3882	3882
TABLE 62. 1977 SO			ENTS TO S		DESTINAT	IONS BY
	:	MODE	OF TRAN	====== SPORTATI	on :	======
DESTINATION STATE OR PORT AREA		RAIL:	TRUCK :		FARM :	TOTAL
			(THOUSAN	DS OF BU	SHELS)	
2703 MINNESOTA 2705 MINNESOTA			875 2990		0	875 3007
TOTAL VOLUME		17	3865	0	0	3882
TABLE 63. 1977 SOY FIRMS IN ORIGINATING STATE OR PORT AREA		MODE	OF TRANS	SPORTATI	DN :	======
	:		TRUCK :			
			(THOUSAN)			
1825 OHIO 1850 OHIO			14893 1301		41677 1468	56697 2779
1902 INDIANA 1903 INDIANA		0	321 4 722		2624 1289	
2300 KENTUCKY		0	0	ŏ	518	
TOTAL VOLUME		137	20130	0	47576	67843

TABLE 64. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 1825, OHIO

	=======		=======		
BECTINATION	MODE	OF TRANS	SPORTATI	ON :	
DESTINATION : STATE OR PORT AREA :	RAIL :	TRUCK :		FARM : TRUCK :	TOTAL
		(THOUSAN	DS OF BU	SHELS)	
1825 OHIO	127	14893	0	0	15020
1850 OHIO	90	2240	0	0	2330
1901 INDIANA	0	62	0	0	62
1902 INDIANA	0	22	0	0	22
2300 KENTUCKY	0	324	0	0	324
6300 DE, MD, NC & VA	8377	0	0	0	8377
6400 FL, GA & SC	6032	0	0	0	6032
6500 AL & TN	1572	0	507	0	2079
7103 TOLEDO AREA	0	4747	0	0	4747
7201 NORTH ATLANTIC	6578	0	0	0	6578
7202 SOUTH ATLANTIC	6339	0	0	0	6339
7301 EAST GULF	164	0	0	0	154
7302 LOUISIANA GULF	0	0	10496	0	10496
TOTAL VOLUME	29279	22288	11003	0	62570

TABLE 65. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 1850, OHIO

ORIGINATING STATE OR PORT AREA	MODE OF TRANSPORTATION	
	: : : : FARM : RAIL : TRUCK : BARGE : TRUCK :	TOTAL
	(THOUSANDS OF BUSHELS)	
1825 OHIO 1850 OHIO	90 2240 0 1018 124 14968 0 37922	3348 53014
TOTAL VOLUME	214 17208 0 38940	56362

TABLE 66. 1977 SOY8 FIRMS IN	EAN SHIPM AREA 1850		VARIOUS	DESTINAT	IONS BY
DESTINATION	MODE	DF TRAN	SPORTATI	0N :	======
STATE OF SOFT AREA	RAIL:	TRUCK :	: BARGE :	FARM : TRUCK :	TOTAL
		(THOUSAN	DS OF BU	SHELS)	
1825 OHIO 1850 OHIO 1901 INDIANA 1902 INDIANA 7103 TOLEDO AREA 7201 NORTH ATLANTIC 7202 SOUTH ATLANTIC	124 0 0 3713	4364 189 21359	0 0 0	0 0 0 0	189 25072 207
7202 SOUTH ATLANTIC	12953	O	0	O	12953
TOTAL VOLUME	17007	42181	0	0	59188
TABLE 67. 1977 SOYB	EAN RECEI AREA 3600			DRIGINS	BY
ORIGINATING :	MODE	OF TRAN	SPORTATIO	DN :	
STATE OR PORT AREA			BARGE :		TOTAL
		(THOUSAN	DS OF BU	SHELS)	
3000 ARKANSAS 3600 DKLAHDMA			0		6220
TOTAL VOLUME	0	214	0		
TABLE 68. 1977 SOYB	AREA 3600		MA	DESTINAT	
DESTINATION	MODE	OF TRAN	SPORTATI	ON :	
STATE OR PORT AREA	RAIL :	TRUCK :	BARGE :	FARM : TRUCK :	TOTAL
		(THOUSAN	DS OF BU	SHELS)	
3600 OKLAHOMA 3745 TEXAS 6600 KS & NE 7301 EAST GULF 7302 LOUISIANA GULF	1852 111 0	984 325 0	0 0 0 350 1900	0	214 2836 436 350 1900
TOTAL VOLUME	1963	1523	2250	0	5736

TABLE 69. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 3300, SOUTH DAKOTA

ORIGINATING	:	MODE	OF TRAN	SPORTATI	ON :			
STATE OR PORT AREA		RAIL:	TRUCK :		FARM : TRUCK :	TOTAL		
			(THOUSAN	DS OF BU	SHELS)			
3300 SOUTH DAKOTA		0	0	0	7688	7688		
TOTAL VOLUME		0	O	0	7688	7688		
TABLE 70. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 3300, SOUTH DAKOTA								
DESTINATION				SPORTATI	 :	TOTAL		
STATE OR PORT AREA		RAIL:		BARGE :		TUTAL		
			(THOUSAN	DS OF BU	SHELS)			
2703 MINNESOTA 2705 MINNESOTA		59 291			-	1004 717		
2801 IOWA			4626	Ŏ		6199		
7303 NO. TEXAS GULF 7401 COLUMBIA RIVER		51 0	0 34	0	0	51 34		
TOTAL VOLUME		1974	6031	0	0	8005		

TABLE 71. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 3700, TEXAS

	: = = = = = = = = :		======	======	======
ORIGINATING	: MODE	E OF TRANSP	ORTATIO	N :	
STATE OR PORT AREA	RAIL	TRUCK B	_		TOTAL
		(THOUSANDS	OF BUS	HELS)	
3700 TEXAS 4100 NEW MEXICO	165 0	272 3	0	3612 0	4049 3
TOTAL VOLUME	165	275	0	3612	4052

0 145

TABLE 72. 1977 SOYB FIRMS IN	AREA 3700	, TEXAS						
:	MODE	OF TRANS			======			
DESTINATION : STATE OR PORT AREA :		: TRUCK :	BARGE :	FARM : TRUCK :	TOTAL			
		(THOUSAN	DS OF BU	SHELS)				
3700 TEXAS 3745 TEXAS 6600 KS & NE 7302 LOUISIANA GULF	12 0	33	0	0 0	74			
7303 NO. TEXAS GULF	1923	1304	ō	ŏ	3227			
TOTAL VOLUME	2460		0	0	4131			
TABLE 73. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 3745, TEXAS								
ORIGINATING : STATE OR PORT AREA :			: :	FARM :				
	take take take take take take take take	(THOUSANI	DS OF BUS	SHELS)				
3000 ARKANSAS 3600 OKLAHOMA 3700 TEXAS 3745 TEXAS	46 1852 12 18	141 984 62 52	0 0	0 0 0 1051	187 2836 74 1121			
TOTAL VOLUME		1239		1051	4218			
TABLE 74. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 3745, TEXAS								
		(THOUSANI			~~			
3000 ARKANSAS 3745 TEXAS	0	75 52	0	0				

18 127

TOTAL VOLUME

TABLE 75. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 3789, TEXAS

		OF TRANSPO	RTATION	:			
ORIGINATING STATE OR PORT AREA	RAIL		: F		TOTAL		
	(THOUSANDS	OF BUSH	ELS)			
3789 TEXAS	0	0	0	8563	8563		
TOTAL VOLUME	0	0	0	8563	8563		
TABLE 76. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 3789, TEXAS							
DESTINATION STATE OR PORT AREA	RAIL	TRUCK : BA			TOTAL		
		THOUSANDS	05 0000	ELCI			
	•	CONNCOUNT	ur Bush	ELO,			
7303 NO. TEXAS GULF	·	6165	-,	0	6165		
7303 NO. TEXAS GULF	0		0	0			

TABLE 77. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 2100, WISCONSIN

2256 ILLINDIS 0 0 0 94 94 2705 MINNESUTA 0 586 0 110 696 2803 IOWA 0 946 0 0 946						
STATE OR PORT AREA : : : : : : FARM : TOTAL : RAIL : TRUCK : BARGE : TRUCK : (THOUSANDS OF BUSHELS) 2100 WISCONSIN	COTCINATING	: MO	DE OF TRA	NSPORTATI	חם	
2100 WISCONSIN 0 164 0 7174 7336 2256 ILLINDIS 0 0 0 94 94 2705 MINNESOTA 0 586 0 110 696 2803 IOWA 0 946 0 0 946		RAIL	: : TRUCK	-		
2256 ILLINDIS 0 0 0 94 94 2705 MINNESUTA 0 586 0 110 696 2803 IOWA 0 946 0 0 946			AZUOHT)	NDS OF BU	SHELS)	
	2256 ILLINOIS		0 0	Ō	94	7338 94 696
TOTAL VOLUME 0 1696 0 7378 9074	2803 IOWA		0 946	0	0	946
	TOTAL VOLUME		0 1696	0	7378	9074

TABLE 78. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 2100, WISCONSIN

DESTINATION	MODE	OF TRAN	SPORTATIO	DN :	
STATE OR PORT AREA	RAIL	TRUCK :	-	FARM : TRUCK :	TOTAL
		(THOUSAN	DS OF BU	SHELS)	
2100 WISCONSIN	0	164	0	0	164
2256 ILLINDIS	0	541	0	0	541
2257 ILLINOIS	0	30	0	0	30
2260 ILLINOIS	0	30	0	0	30
2705 MINNESOTA	178	726	0	0	904
2802 IOWA	0	156	0	0	156
2803 IOWA	0	.132	0	0	132
7102 CHICAGO AREA	1432	3015	0	0	4447
7302 LOUISIANA GULF	0	0	1350	0	1350
TOTAL VOLUME	1610	4794	1350	0	7754

TABLE 79. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 6200, NJ, NY & PA

ORIGINATING STATE OR PORT AREA	MODE OF	TRANSPOR	TATIO)N	
	RAIL: TR	UCK : BAR	_	FARM : TRUCK :	TOTAL
	(TH	OUSANDS O	F BUS	SHELS)	
6200 NJ, NY & PA	0	0	0	4221	4221
TOTAL VOLUME	0	0	0	4221	4221

TABLE 80. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 6200, NJ, NY & PA

DESTINATION	MODE	OF TRANSPI	DRTATION	:	
STATE OR PORT AREA	RAIL	TRUCK : B	= .		TOTAL
		(THOUSANDS	OF BUSHE	LS)	
6300 DE, MD, NC & VA	0	4124	0	0	4124
7201 NORTH ATLANTIC	0	1190	0	0	1190
7202 SOUTH ATLANTIC	0	73	0	0	73
TOTAL VOLUME	0	5387	0	0	5387

TABLE 81. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 6300, DE, MD, NC & VA

COLCINATING .	MODE	OF TRANS	SPORTATI	====== ON :	
ORIGINATING ; STATE OR PORT AREA :	RAIL:	TRUCK :	BARGE :	FARM : TRUCK :	TOTAL
		(THOUSAND	S OF BU	SHELS)	
1825 OHIO	8377	0	0	0	8377
1902 INDIANA	3	0	0	0	3
AMAIDNI E081	316	0	0	0	316
2300 KENTUCKY	2426	0	0	0	2426
6200 NJ, NY & PA	0	4124	0	430	4554
6300 DE, MD, NC & VA	3639	25866	350	44326	74181
6400 FL, GA & SC	548	20	0	3200	3768
6500 AL & TN	320	0	0	0	320
7102 CHICAGO AREA	327	0	0	0	327
TOTAL VOLUME	15956	30010	350	47956	94272

TABLE 82. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 6300, DE, MD, NC & VA

DESTINATION	: MODE	OF TRAN	SPORTATI	DN :	
STATE OR PORT AREA	RAIL	TRUCK :		FARM : TRUCK :	TOTAL
		(THOUSAN	DS OF 8U	SHELS)	
6300 DE, MD, NC & VA	3639	25866	350	Q	29855
6400 FL, GA & SC	315	850	0	0	1165
7202 SOUTH ATLANTIC	991	1436	5119	0	7546
TOTAL VOLUME	4945	28152	5469	0	38266

TABLE 83. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 6400, FL, GA & SC

	=======		======		======
ORIGINATING :	MODE	OF TRANSF	PORTATIO	ON :	
STATE OR PORT AREA	RAIL :	TRUCK : E	: BARGE :	FARM TRUCK	TOTAL
		(THOUSANDS	of Bus	SHELS)	
1825 OHIO	6032	0	0	0	6032
1903 INDIANA	3451	0	0	0	3451
2259 ILLINOIS	1687	0	0	0	1687
2262 ILLINOIS	250	0	0	0	250
2270 ILLINDIS	600	0	0	0	600
2300 KENTUCKY	225	0	0	0	225
6300 DE, MD, NC & VA	315	850	0	0	1165
6400 FL, GA & SC	9931	7463	0	30051	47445
6500 AL & TN	1998	0	0	0	1998
TOTAL VOLUME	24489	8313	0	30051	62853

TABLE 84. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 6400, FL, GA & SC

DESTINATION	:	MOI)E	OF TRANS	SPORTAT	ION	
STATE OR PORT AREA	: :	RAIL	:	TRUCK :	BARGE	: FARM :	TOTAL
				(THOUSANI	OS OF B	USHELS)	
2500 MISSISSIPPI		103	3	0	0	0	103
6300 DE, MD, NC & VA		548	3	20	0	0	568
6400 FL, GA & SC		9931	Ţ	7463	0	0	17394
6500 AL & TN		630)	946	0	0	1576
7202 SOUTH ATLANTIC		1540)	1950	0	0	3490
7301 EAST GULF		94	1	642	1616	0	2352
7302 LOUISIANA GULF	_	()	0	813	0	813
TOTAL VOLUME		12846	3	11021	2429	0	26296

TABLE 85. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 6500, AL & TN

=======================================		=======	=======	======	
	: MOD	E OF TRAN	SPORTATI	ON :	
ORIGINATING STATE OR PORT AREA		 : :	 :	FARM:	TOTAL
	: RAIL	: TRUCK :			
		(THOUSAN	DS OF BU	SHELS)	
1825 OHIO	1572	0	507	0	2079
1903 INDIANA	1272	0	475	0	1747
2256 ILLINOIS	0	0	4321	0	4321
2258 ILLINDIS	110		0	0	110
2259 ILLINOIS	5004	0	0	0	5004
2260 ILLINDIS	0	0	3069	0	3069
2262 ILLINOIS	7709	0	3150	0	10859
2300 KENTUCKY	3594	1831	287	450	6162
2500 MISSISSIPPI	755	2593	0	490	3838
2803 IOWA	0	0	587	0	587
2900 MISSOURI	277	0	2000	0	2277
3000 ARKANSAS	178	631	0	536	1345
6400 FL, GA & SC	630	946	0	0	1576
6500 AL & TN	12160	59265	2792	78560	152777
6600 KS & NE	66	0	0	0	66
TOTAL VOLUME	33327	65266	17188	80036	195817

TABLE 86. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 6500, AL & TN

DESTINATION :	MODE	OF TRAN	SPORTATIO	אכ: אכ:	
STATE OR PORT AREA	RAIL :	TRUCK :		FARM : TRUCK :	TOTAL
		(THOUSAN	DS OF BU	SHELS)	
2300 KENTUCKY	0	100	0	0	100
2500 MISSISSIPPI	2600	1257	0	0	3857
6300 DE, MD, NC & VA	320	0	0	0	320
6400 FL, GA & SC	1998	0	0	0	1998
6500 AL & TN	12160	59265	2792	0	74217
7301 EAST GULF	3402	1766	8287	0	13455
7302 LOUISIANA GULF	0	0	18243	0	18243
TOTAL VOLUME	20480	62388	29322	0	112190

TABLE 87. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 6600, KS & NE

	===	=======	=======	=======	======	
ORIGINATING	:	MODE	OF TRANS	SPORTATI	DN :	
STATE OR PORT AREA	:	RAIL :	TRUCK :	-		TOTAL
			(THOUSAN	DS OF BU	SHELS)	
2801 IOWA		168	8728	0	405	9301
2802 IOWA		0	29	0	0	29
2900 MISSOURI		6627	1705	0	4705	13037
3600 OKLAHOMA		111	325	0	0	436
3700 TEXAS		0	33	0	0	33
6600 KS & NE		10330	27874	0	45869	84073
TOTAL VOLUME		17236	38694	0	50979	106909

TABLE BB. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 6600, KS & NE

	- - -					
DECTINATION	:	MODE	OF TRANS	PORTATI	DN :	
DESTINATION STATE OR PORT AREA	:	RAIL	: TRUCK :		FARM : TRUCK :	TOTAL
			(THOUSAND	S OF BU	SHELS)	
2801 IDWA		503	1426	0	0	1929
2900 MISSOURI		1824	1317	0	0	3141
3000 ARKANSAS		1500	0	0	0	1500
3100 LOUISIANA		90	0	0	0	90
6500 AL & TN		66	0	0	0	86
6600 KS & NE		10330	27874	0	0	38204
7301 EAST GULF		2233	0	0	0	2233
7302 LOUISIANA GULF		139	0	1878	0	2017
7303 NO. TEXAS GULF		384	0	0	0	384
7401 COLUMBIA RIVER		182	0	0	0	182
7402 PUGET SOUND		0	253	0	0	253
TOTAL VOLUME		17251	30870	1878	0	49999

TABLE 89. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 7102, CHICAGO AREA

=======================================	===	=======	=======	=======	=======	======
ODICINATING	:	MODE	OF TRAN	SPORTATI	ON	
ORIGINATING STATE OR PORT AREA	:	RAIL	TRUCK :	BARGE:	FARM :	TOTAL
			(THOUSAN	DS OF BL	ISHELS)	
1901 INDIANA		0	9538	0	0	9538
1902 INDIANA		0	995	0	0	995
2000 MICHIGAN		0	1378	0	0	1378
2100 WISCONSIN		1432	3015	0	735	5182
2256 ILLINDIS		1452	4769	1321	52	7594
2257 ILLINOIS		500	888	0	0	1388
2801 IOWA		2040	0	0	0	2040
2802 IDWA		624	194	0	0	818
2803 IDWA		0	447	0	0	447
7102 CHICAGO AREA		111	0	0	0	111
TOTAL VOLUME		6159	21224	1321	787	29491

TABLE 90. 1977 SOY	AREA 7102		D AREA		IONS BY	
		DF TRANS			======	
DESTINATION STATE OR PORT AREA	RAIL	TRUCK :			TOTAL	
		(THOUSAN	DS OF BU	SHELS)		
1901 INDIANA 2256 ILLINDIS 6300 DE, MD, NC & VA 7102 CHICAGO AREA 7201 NORTH ATLANTIC 7202 SOUTH ATLANTIC 7302 LOUISIANA GULF 9000 EXPORT	111 2055 811	0 200 0 0 0 0 0 202		0 0 0 0 0 0	393 200 327 111 2055 811 1670 15866	
TOTAL VOLUME	4366	402	16665	0	21433	
TABLE 91. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 7103, TOLEDO AREA						
ORIGINATING STATE OR PORT AREA	:	OF TRANS	:	FARM:	TOTAL	
		(THOUSAN)	DS OF BU	SHELS)		
1825 OHIO 1850 OHIO 1901 INDIANA 2000 MICHIGAN	3713	4747 21359 1774 11510	0 0	_		
TOTAL VOLUME	4063	39390	0	3342	46795	
TABLE 92. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 7103, TOLEDO AREA						
DESTINATION	MODE	OF TRANS	SPORTATI	ON :		
STATE OR PORT AREA	RAIL	TRUCK :	BARGE :	FARM TRUCK	TOTAL	
		(THOUSANI	DS OF BU	SHELS)		
9000 EXPORT	•	0	47088	0	47088	
TOTAL VOLUME	0	0	47088	0	47088	

TABLE 93. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 7104, SAGINAW AREA

1 11110			, 9,,41,,,,	· ////		
=======================================	:	MODE	OF TRANS		-	======
ORIGINATING STATE OR PORT AREA		RAIL:	TRUCK :	BARGE :	FARM :	TOTAL
			(THOUSAN	os of Bu	SHELS)	
2000 MICHIGAN		0	1148	0	0	1148
TOTAL VOLUME		0	1148	0	0	1148
,	N A	REA 7104	, SAGINA	W AREA		
DESTINATION STATE OR PORT AREA	:	RAIL :	TRUCK :	BARGE:	FARM :	TOTAL
	-		(THOUSAN	DS OF BU	SHELS)	
9000 EXPORT	•	0	0	1148	0	1148
TOTAL VOLUME		0	0	1148	0	1148
TABLE 95. 1977 SOFERMS IN FIRMS IN THE CONTROL OF T	N A	REA 7201	PTS FROM , NORTH (ATLANTIC		=====
		RAIL:	TRUCK :			101HL
			(THOUSAN	OS OF BU	SHELS)	
1825 OHIO 1850 OHIO 1902 INDIANA 2000 MICHIGAN 6200 NJ, NY & PA 7102 CHICAGO AREA		6578 207 2055 2055	0	0 0 0 0	0	6578 207 2055 2055 1190

TOTAL VOLUME 12950 1190 0 0 14140

TABLE 96. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 7201, NORTH ATLANTIC

DESTINATION	MOI	E OF TRAI	NSPORTATI	ON :	
STATE OR PORT AREA	RAIL	: : TRUCK	BARGE :		TOTAL
		(THOUSA	NDS OF BU	SHELS)	
9000 EXPORT	() 0	13802	0	13802
TOTAL VOLUME) 0	13802	0	13802

TABLE 97. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 7202, SOUTH ATLANTIC

=======================================		=======	======	=======	======
ORIGINATING	: MODE	OF TRANS	PORTATIO	DN :	
STATE OR PORT AREA	RAIL:	TRUCK:	=	FARM : TRUCK :	TOTAL
		(THOUSAND	S OF BU	SHELS)	
1825 OHIO	6339	0	0	0	6339
1850 OHIO	12953	0	0	0	12953
1901 INDIANA	4727	0	0	0	4727
1902 INDIANA	16167	0	0	0	16167
2000 MICHIGAN	2000	0	Ö	0	2000
2257 ILLINOIS	1112	0	0	0	1112
2258 ILLINOIS	335	ō	Ō	Ō	335
2801 IOWA	377	Ō	Ō	Ō	377
2802 IDWA	52	Ō	Ō	Ō	52
6200 NJ, NY & PA	0	73	Ō	60	133
B300 DE, MD, NC & VA	-	1436	5119	140	7686
6400 FL, GA & SC	1540	1950	0	600	4090
7102 CHICAGO AREA	811	0	ŏ	0	811
TOTAL VOLUME	47404	3459	5119	800	56782

TABLE 98. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 7202, SOUTH ATLANTIC

			======	======			
DESTINATION	: MC	DE OF	TRANSP	ORTATIO	ON :		
STATE OR PORT AREA	RAIL	: - : TR	RUCK : B		FARM : TRUCK :	TOTAL	
	(THOUSANDS OF BUSHELS)						
9000 EXPORT		0	0	53996	0	53996	
TOTAL VOLUME		0	0	53996	0	53996	

TABLE 99. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 7301, EAST GULF

	===			=======		
ORIGINATING	: _	MODE	OF TRAN	SPORTATI	ON :	
STATE OR PORT AREA	:.	RAIL :	TRUCK :	BARGE :		TOTAL
			(THOUSAN	DS OF BU	SHELS)	
1825 OHIO 1901 INDIANA 1903 INDIANA		164 212 329	0 0 0	0 0 87	0 0 0	164 212 416
2256 ILLINOIS 2259 ILLINOIS		0 621	0	2000	0	2000 621
2260 ILLINOIS 2262 ILLINOIS		0 685	0	6528 1400	0	6528 2085
2500 MISSISSIPPI 2703 MINNESGTA		5330 3636	111 0	144 0	0	5585 3636
2705 MINNESOTA 2801 IOWA		0 2338	0	50 0	0	50 2338
2802 IDWA 2803 IDWA		3782 88	0	0 403	0	3782 491
2900 MISSOURI 3000 ARKANSAS		575 8163	0 2370	153 12713	0	728 23246
3600 BKLAHDMA 6400 FL, GA & SC		94	642	350 1616	0	350 2352
6500 AL & TN 6600 KS & NE		3402 2233	1766 0	8287 0	850 0	14305 2233
TOTAL VOLUME		31652	4889	33731	850	71122

TABLE 100. 1977 SOY FIRMS IN	AREA 7301	EAST GL	JLF		
		OF TRANS			
DESTINATION STATE OR PORT AREA	RAIL	TRUCK :	: BARGE :	FARM TRUCK	TOTAL
		(THOUSANI	S OF BU	SHELS)	
9000 EXPORT	0	0	68325	0	68325
TOTAL VOLUME	0	0	68325	0	68325
	AREA 7302				вч
	: MODE	OF TRANS	SPORTATI	====== ON :	
ORIGINATING STATE OR PORT AREA	RAIL		BARGE:	FARM : TRUCK :	TOTAL
		(THOUSANI	OS OF BU	SHELS)	
1825 OHIO 1903 INDIANA	0 50 0 0		10496 8033		10496 8083
2100 WISCONSIN	50		1350		1350
2256 ILLINOIS	ŏ	٥	36158		36158
2257 ILLINDIS	1135	ŏ	0	Ö	1135
2258 ILLINOIS	647	0	0	0	647
2259 ILLINOIS	0	0	3483	0	3483
2260 ILLINDIS	0	0	23614	0	23614
2261 ILLINOIS	0	0	13042	0	13042
2262 ILLINOIS	305		21323		21628
2300 KENTUCKY 2500 MISSISSIPPI	21 2002	66	11393 26239	0	11414 28307
2705 MINNESOTA	0	0	24490	ŏ	24490
2801 IOWA	12260	ŏ	848	ŏ	13108
2802 IOWA	6208	0	0	0	6208
2803 IOWA	341	0	28469	0	28810
2900 MISSOURI	0	0	40777	0	40777
3000 ARKANSAS	6149	989	25873	0	33011
3100 LOUISIANA	1613	9744	45381	0	56738
3600 OKLAHOMA 3700 TEXAS	0 360	0	1900 0	0	1900 360
6400 FL, GA & SC	0	Ö	813	Ö	813
6500 AL & TN	ŏ	ŏ	18243	ŏ	18243
6600 KS & NE	139	ŏ	1878	ŏ	2017
7102 CHICAGO AREA	0	Ö	1670	Ö	1670
TOTAL VOLUME	31230	10799	345473	0	387502

TABLE 102. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 7302, LOUISIANA GULF								
DESTINATION			SPORTATIO					
STATE OR PORT AREA	RAIL:	TRUCK :	BARGE :	FARM : TRUCK :	TOTAL			
		(THOUSAN	DS OF BU	SHELS)				
9000 EXPORT	0	0	368153	0	368153			
TOTAL VOLUME	0	0	368153	0	368153			
TABLE 103. 1977 SOYE	AREA 7303	, NO. TE	XAS GULF					
ORIGINATING	MODE	OF TRAN	SPORTATIO	אכ :				
STATE OR PORT AREA	RAIL :	TRUCK :	BARGE:	FARM : TRUCK :	TOTAL			
		(THOUSAN	DS OF BU	SHELS)				
	320 396	0	0	0	320 396			
2801 IOWA 2802 IOWA	4150 1876	0	0	0	4150 1876			
2803 IOWA 2900 MISSOURI	101 1229	0	0	0	101 1229			
3000 ARKANSAS	158	0	ŏ	Ŏ	158			
3100 LOUISIANA	13 51	9421	0	0	9434			
3300 SOUTH DAKOTA 3700 TEXAS	1923	0 1304	0	0	51 3227			
3789 TEXAS	0	6165	ŏ	ŏ	6165			
6600 KS & NE	384	0	0	0	384			
TOTAL VOLUME	10601	16890	0	0	27491			
TABLE 104. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 7303, NO. TEXAS GULF								
	MODE	OF TRAN	SPORTATIO	אכ :				
DESTINATION STATE OR PORT AREA	RAIL	TRUCK :	BARGE:	FARM : TRUCK :	TOTAL			
		(THOUSAN	DS OF BU	SHELS)				
9000 EXPORT			27450					
TOTAL VOLUME	0	0	27450	0				

TABLE 105. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 7401, COLUMBIA RIVER

			. 			
ORIGINATING	:	IODE OF	TRANSPO	RTATION		
STATE OR PORT AREA	RAI	: L : TR	UCK : BA		ARM : RUCK :	TOTAL
		(TH	IOUSANDS	OF BUSH	ELS)	
2703 MINNESOTA 3300 SOUTH DAKOTA	3	349	0 34	0	0	349 34
6600 KS & NE	1	.82	0	0	0	182
TOTAL VOLUME		31	34	0	0	565

TABLE 106. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 7401, COLUMBIA RIVER

DESTINATION STATE OR PORT AREA	MODE	OF TRAN	SPORTATI	DN :	
	RAIL	: TRUCK :		FARM TRUCK	TOTAL
		(THOUSAN	DS OF BU	SHELS)	
9000 EXPORT	0	0	565	0	565
TOTAL VOLUME	0	0	565	0	565

TABLE 107. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 7402, PUGET SOUND

ORIGINATING	:	MODE	OF TRAN	SPORTATI	ON :	
STATE OR PORT AREA	:	RAIL	: TRUCK :			TOTAL
			(THOUSAN	DS OF BU	SHELS)	
2703 MINNESOTA 6600 KS & NE		190 0	0 253	0	0	190 253
TOTAL VOLUME		190	253	0	0	443

TABLE 10B.	1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS B	Y
	FIRMS IN AREA 7402. PHRET SOUND	

				- -		
DESTINATION	:	MODE	OF TRANS	PORTATI	DN :	
STATE OR PORT AREA	:	=	TRUCK :	-	FARM : TRUCK :	TOTAL
			(THOUSAN)	os of Bu	SHELS)	
9000 EXPORT		0	0	443	0	443
TOTAL VOLUME		0	0	443	0	443

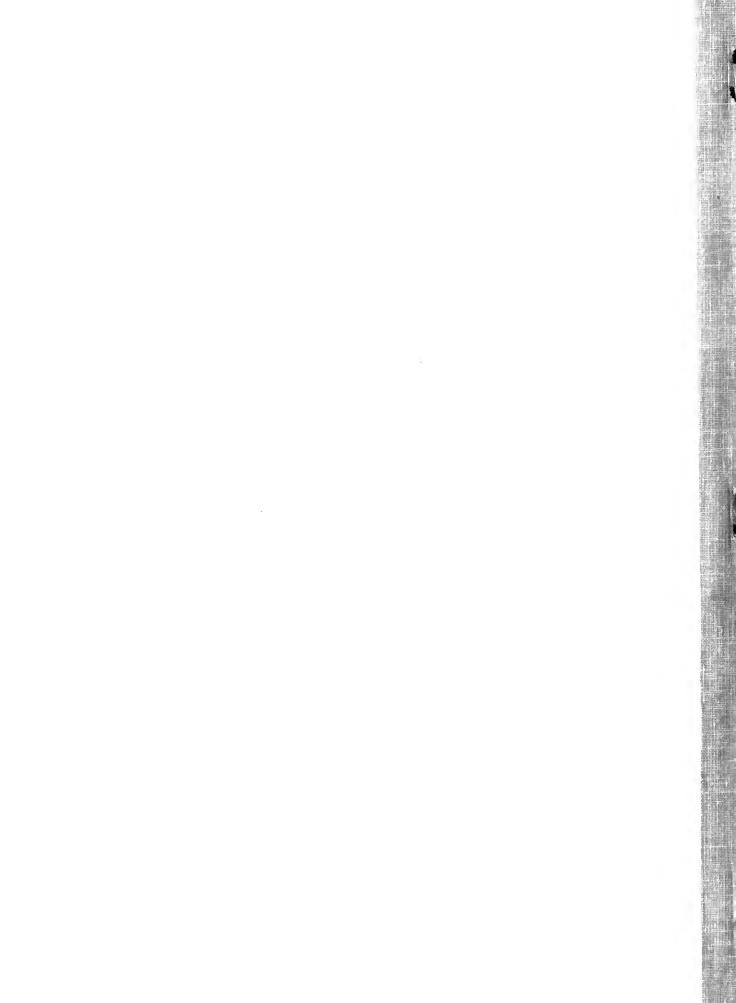
TABLE 109. 1977 SOYBEAN RECEIPTS FROM VARIOUS ORIGINS BY FIRMS IN AREA 7403, CALIFORNIA

=======================================			=======	=======	======
ORIGINATING	: MODE	OF TRAN	SPORTATI	ON :	
STATE OR PORT AREA	RAIL	TRUCK :			TOTAL
		(THOUSAN	DS OF BU	SHELS)	
2801 IOWA	295	0	0	0	295
TOTAL VOLUME	295	0	0	0	295

TABLE 110. 1977 SOYBEAN SHIPMENTS TO VARIOUS DESTINATIONS BY FIRMS IN AREA 7403, CALIFORNIA

DECTINATION	MODE	OF TRANS	SPORTATIO	IN :	
DESTINATION STATE OR PORT AREA	RAIL	TRUCK :	_	FARM : TRUCK :	TOTAL
		(THOUSAN)	DS OF BUS	SHELS)	
9000 EXPORT	0	0	295	0	295
TOTAL VOLUME	0	0	295	0	295

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